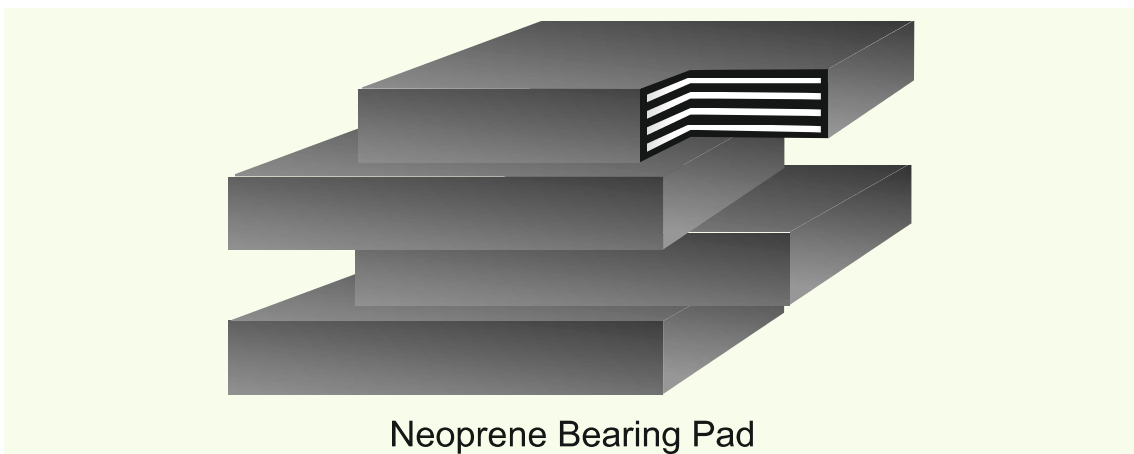


NEOPRENE BEARING PAD

(MORTH & R.D.S.O, DGS & D APPROVED)



Neoprene Bearing Pad

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ADVANTAGE OF NEOPRENE ELASTOMERIC BEARING PAD

As efficient bearing plates for pre-cast, pre-stressed concrete or steel beams in bridges and buildings. Neoprene pad-plain and laminated-manufactured by Maruti permits a smooth and uniform transfer of load from the beam to the substructure and allow beam rotation at the bearing due to deflection of the beam under load. They further allow lateral and longitudinal movement of the beam caused by thermal forces. Neoprene pads have no moveable parts and thermal expansion and contraction are absorbed by the pads enable to give and take in shear. There is no sliding motion between pad and beam or between pad and abutment.



QUALITY CONTROL

Lab is equipped with latest instruments like Tensile Tester, IRHD hardness Tester, Tension set Appartus, Air oven, Muffle furnace, humidity chamber, High voltage tester and Bi-Axial testing machine and all instruments are calibrated from NABL certified lab.



View
Vertical Load Testing



View
Shear Load Testing



NEOPRENE BEARING PAD

Physical Properties as per standard
IRC-83 (Part-II)
With Steel Lamination

Physical Properties as per standard
ASTMD-15 (Part B)
Without Lamination

Sl. No.	TYPE OF TEST	UNIT	SPECIFIED	UNIT	SPECIFIED DURO 50	SPECIFIED DURO 60	SPECIFIED DURO 70
1.	Tensile Strength (ASTMD-412)	kgf/cm ² Mpa	175 min 17 min	kgf/cm ² Psi	175 2500 (17 Mpa)	175 2500 (17 Mpa)	175 2500 (17 Mpa)
2.	Elongation at break (ASTMD-412)	%	400 min	%	450	400	300
3.	Hardness (ASTMD-2240)	Shore-A	60±5	Duro Meter	50±5	60±5	70±5
4.	Compression Set (ASTMD-395)	%	35 max 100° Cx22HRS	% 70° Cx22HRS	25 Max	25 Max	25 Max
5.	Aging test (ASTMD-573) at 100°C for 70 Hours a. Change in tensile strength b. Change in elongation c. Change in hardness	% % Shore-A	- 15 Max -40 Max + 15	% % Duro Meter	±15 Max +40 Max + 15	±15 Max +14 Max + 15	±15 Max +14 Max + 15
6.	Adhesion Test	KN/mtr	7 min	-	-	-	-
7.	Shape Factor	-	6-12	-	-	-	-
8.	Tear Resistance (ASTMD 624)	-	-	kgf/cm	45 min	45 min	45 min
9.	Ozone resistance (ASTMD1149) at (1 ppm in air by volume/20%) strain/38± 1°C/100 Hours	-	No Crack	-	No Crack	No Crack	No Crack
10.	Low temperature stiffness at (-4.4°C young's modulus (ASTMD-797)	-	-	kgf/cm ² Psi	700 10,000	700 10,000	700 10,000)



Bi-Axial Testing Machine



Calendering Machine

NEOPRENE BEARING PAD

TECHNICAL DATA SHEET:

PLAN DIMENSION SHOULD BE AS PER SERIES

lo	Over all Length
bo	Over all Width
l	Effective length (excluded side cover)
b	Effective Width (excluded side cover)
c	Thickness of side cover
h	Total height of elastomer
hs	Thickness of steel plate
hi	Thickness of elastomer
he	Thickness of top/bottom elastomer
n	No. Of layers of elastomer

1. lo / bo ≤ 2				
2. hi (mm) (Thickness of polymer)	8	10	12	16
3. hs (mm) (Thickness of steel plate)	3	3	4	6
4. C(thickness of side cover)	6			
5. S (shape factor)	6 to 12			

Total thickness of Bearing Pad
 $H = n \cdot Hi + 2 \cdot He + (n+1) \cdot Hs$

NEOPRENE BEARING PAD

Size	Effective Area Ax10-4mm	Max. Load Nmax KN	Min. Load Nmin. At 20 Mpa KN	Polymer Thickness hi (mm)	No. of Layers n	Total Height h (mm)	Shape Factor S	Elastic Modulus Mpa	Shear Modulus Kgf/Cm ²	Hardnew Store-A
200x350	6.35	635	127	8	4	40	7.91	325 217	9.22	57
250x300	6.85	685	137	8	5	48	8.14	342 228	9.14	56
250x400	9.23	923	185	10	4	50	7.37	286 190	9.25	57
250x500	11.61	1161	232	10	4	50	8.00	334 222	9.15	56
300x400	15.00	1117	223	10	4	60	8.26	353 235	9.30	57
320x500	15.00	1500	300	10	5	60	9.44	444 293	9.65	60
350x450	14.80	1480	296	12	5	72	7.95	328 218	9.4	59
300x600	16.93	1693	339	10	5	60	9.66	461 308	9.22	57
400x400	15.05	1505	301	12	5	72	8.08	342 228	9.65	60
450x500	18.93	1893	379	12	5	72	9.00	406 270	9.42	59
400x800	30.60	3100	600	12	5	72	10.83	534 356	9.35	58
550x550	28.94	2900	579	12	5	72	11.20	574 382	10.55	62