NEOSORB® (AASHTO grade polychloroprene) Bearing Pads

NEOSORB[®] plain elastomeric (polychloroprene/neoprene) bearing pads are molded or cut to size from larger slabs to provide a low-cost, single element structural bearing. Plain elastomeric bearings are a cost effective option for applications with moderate load transfer and movement requirements. NEOSORB[®] pads accommodate surface irregularities, vertical load, and rotation through vertical deflection, while longitudinal movement is accommodated through shear deformation. These pads are suitable for use in pre-cast concrete, cast in place concrete, and steel framed structures.

NEOSORB[®] is available in all 3 standard AASHTO durometers: 50, 60, and 70, widths up to 48", and lengths up to 49 feet (+/- 1 ft). NEOSORB[®] is typically available from stock in the following thickness: 1/8", 1/4", 1/2", 3/4", and 1".

For pad sizing and selection in the absence of project specifications or owner design criteria, Voss Engineering, Inc. recommends following AASHTO Section 14 Design Specifications for plain elastomeric bearings (PEP).

NEOSORB [®] STANDARD MATERIAL PROPERTIES						
Material Property	ASTM Standard		Polychloroprene			
		Test Requirement	50 Duro	60 Duro	70 Duro	Units
Physical Properties	D 2240	Hardness	50 +/-5	60 +/- 5	70 +/-5	Shore A
	D 412	Min tensile strength	2250 (15.5)	2250 (15.5)	2250 (15.5)	psi (Mpa)
		Min ultimate elongation	400	350	300	%
Heat Resistance	D 573	Specified temp. of the test	212 (100)	212 (100)	212 (100)	^o F (^o C)
		Aging time	70	70	70	Hours
		Max change in durometer hardness	15	15	15	Shore A
		Max change in tensile strength	-15	-15	-15	%
		Max change in ultimate elongation	-40	-40	-40	%
Compressive Set	D 395 Method	Specified temp. of the test	212 (100)	212 (100)	212 (100)	°F (°C)
	B	Max Permissible test (after 22 hrs)	35	35	35	%
Ozone Resistance	D 1149	100 pphm ozone in air by volume 20% strain at 100 °F, +/- 2 °F (37.7 °C +/- 1 °C) 100 hours, mounting procedure D 518, method A	No cracks	No cracks	No cracks	
Tear Resistance	D 624 Die C	Minimum pounds per inch	180	180	180	Lbs/in
Brittleness	D 746	Low temperature brittleness at -40°	No Failure	No Failure	No Failure	

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