

# Williams AASHTO Grade 3 Neoprene Bearing Pads Specification M251-06

Bridge Bearing contain only virgin crystallization resistance Polychloroprene (Neoprene) raw polymer Grade 3

## Details

### USES

As economical efficient bearing plates for pre-cast, pre-stressed concrete or steel beams in bridges and buildings.

Neoprene Pads permit 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 pad's ability to give and take in shear. There is no sliding between pad and beam or between pad and abutment.

### CONTACT US

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## Typical Physical Properties

MATERIAL PROPERTY	ASTM STANDARD	TEST REQUIREMENTS	50 DURO	60 DURO	70 DURO	UNITS
Physical Properties	D2240	Hardness Min Tensile Strength Min Ultimate Elongation	50 ±5 2250* 400	60 ±5 2250* 350	70 ±5 2250* 300	ShoreA psi (Mpa) %
Heat Resistance	D573 at spec. temp	Specified Temp of Test Aging Time Max Change in Duro Hardness Max Change in Tensile Strength Max Change in Ultimate Elongation	212 (100) 70 +15 -15 -40	212 (100) 70 +15 -15 -40	212 (100) 70 +15 -15 -40	°F (°C) Hours *Shore Pt % %
Compression Set	D395 Method B at Spec. Temp	Specified Temp of Test Degrees Max Permissible Test (after 22 Hours)	212 (100) 35	212 (100) 35	212 (100) 35	°F (°C) %
Bar Resistance	D624	Min Pounds Per Inch (Die C)	180	180	180	Pounds/In
Brittleness Ozone Resistance	D2137 D1149	Low Temp Brittleness at -40°F (-	Pass 50	Pass 50	Pass 50	Mpa Hours

MATERIAL PROPERTY	ASTM STANDARD	TEST REQUIREMENTS	50 DURO	60 DURO	70 DURO	UNITS
		40°C) Partial Presser of Ozone During Test Duration of Test Tested at 20% Strain 100°F ±2°F (37.7°C ±1°C) Mounting Pressure	100 No Cracks	100 No Cracks	100 No Cracks	
Shear Modulus	D4014	At 73°F (23°C)	0.60- 0.77 85-110	0.85- 1.10 120- 155	1.13- 1.84 160-260	Mpa PSI

Note: Williams Bearing Pads conforms to grade 3 as follows:

**LOW TEMPERATURE BRITTLINESS:** D-746, procedure B, @ -40°F, resulting in no failures, 50, 60, and 70 ±5% Shore A Durometer.

**INSTANTANEOUS THERMAL STIFFENING:** D-1043, grade 3, tested @ -40°F.

**LOW TEMPERATURE CRYSTALLIZATION:** Grade 3, 14 days, @ -15°F.

Stiffness at test temperature shall not exceed 4 times the stiffness measured at 73°F.

\* Higher tensile strength available upon request