

SHEAR MODULUS WHITE PAPER

Elastomers are typically used in shear for parts such as mounting brackets and suspension assemblies. These types of applications are chosen because elastomers will deflect much more easily in shear than in compression. Shear loading is a combination of tension and compression forces. Since polyurethane has high load bearing capacity in tension and compression, it also has high load bearing capacity in shear.

Shear is the ratio of deformation to elastomer thickness. Shown below is a table representative of the shear modulus of several different Gallagher Corp polyurethane compounds. We encourage you to [watch the video](#) to learn more about polyurethane in shear and see how we determine the shear modulus in our materials testing lab. Please contact us for more information and to see how we can put our material to work for you.

Shear Modulus Summary Table

Shear Modulus (Quad Shear Method), psi (MPa)

Compound	960	1280	1285	1290	1090	1095	1575
Hardness	60A	80A	85A	90A	90A	95A	75D
Shear Modulus, G	180 (1.2)	470 (3.2)	745 (5.1)	920 (6.3)	1300 (8.9)	2,400 (16.5)	12,300 (84.8)

