



HANNA RUBBER COMPANY

Resources

Shore Durometer Compression Deflection Comparison

Shore Durometer is a measure of surface hardness. It can be greatly effected by the skin surface of the product and cell size. Compression deflection is a measure of the force to deflect the product either a specified percentage or load. In the case of ASTM D 1056, it is the force in psi to deflect the product 25% of its original height. The presser foot used to apply the load is larger than the sample, so the same result is obtained regardless of thickness (unlike the ILD measurement generally used for open cell urethane foams).

Compression Deflection is a better measurement of the product's true hardness. This information is for general comparison purposes only and should not be considered to be an exact conversion. Hanna Rubber's products are manufactured according to hardness ranges as specified by ASTM D 1056 and ASTM D6576 (25% deflection), not according to a particular Durometer range. Shore 00 Durometer readings are generally used for closed cell foam products.

Shore Durometer 00	Shore Durometer A
45	5
55	10
62	15
70	20
76	25
80	30
83	35
86	40
88	45
90	50
91	55
93	60
94	65
95	70
97	75

Shore Durometer (00) Approximate	20-55	35-65	60-80	65-85	70-90
Compression Deflection 25% (psi)	2-5	5-9	9-13	13-17	17-24
ASTM D 1056 Grade '68	41	42	43	44	45
ASTM D 1056 Grade '98	1	2	3	4	5

Hanna Rubber accepts no responsibility for results obtained. Each user of these products, or information, should perform their own tests to determine the suitability of the material. Hanna Rubber does not guarantee that the user will obtain the same results. The data and information are subject to change without notice.