

Hardness of rubber-Durometer

Durometer...the measure of the hardness of rubber compounds

The Durometer is the International Standard Instrument used to measure the hardness of rubber or rubber-like materials. Durometers measure hardness by the penetration of an indenter into the rubber sample. The calibrated reading is expressed in a number value. The hardness values are always expressed in terms of plus or minus (\pm) five points (example: 60 \pm 5 Durometer).

It is important to note that when testing hardness of a rubber sample, the material should not be less than ¼" thick (.250").

Durometer Type (Shore)	Applicable to these types of materials
Type A (Shore)	Soft rubber & plastics
Type D (Shore)	Hard rubber & plastics
Type 00 (Shore)	Sponge & foam

Approximate Durometer Hardness Comparisons

Durometer Type (Shore)	Shore A	Shore D	Shore 00
	100	58	
	95	46	
	90	39	
	85	33	
	80	29	98
	75	25	97
	70	22	95
	65	19	94
	60	16	93
	55	14	91

Durometer Type (Shore)	Shore A	Shore D	Shore 00
	50	12	90
	45	10	88
	40	8	86
	35	7	83
	30	6	80
	25		76
	20		70
	15		62
	10		55
	5		45

The above values are approximate and are not to be used as an exact equivalent. This information is provided as a selection guide only.

Here are a few examples of hardness based on Durometer scale:

- Rubber band: 35 Shore A
- Rubber tire: 55 Shore A
- Rubber shoe heel: 70 Shore A
- Typewriter platen: 95 Shore A