



STOCKWELL RUBBER COMPANY, INC.
 4749 Tolbut Street • Philadelphia, PA 19136
 (800) 523-0123 • (215) 335-3005 • Fax (215) 335-9433
 www.stockwell.com • e-mail: service@stockwellrubber.com



Dimensional Tolerances

Die Cut & WaterJet Cut Sponge Components

		<u>Stockwell</u>		<u>Rubber Manufacturers Assoc.</u>	
		<u>WATER JET</u>	<u>DIE CUT</u>	<u>BL1</u>	<u>BL2</u>
For material thickness: up to .125"					
D i m e n s i o n	Under 0.50"	+/- .010	+/- .015	+/- .025	+/- .032
	0.50 to 0.99"	+/- .015	+/- .020	+/- .025	+/- .032
	1.0 to 6.3"	+/- .015	+/- .025	+/- .032	+/- .040
	over 6.3" multiply by	0.0025	0.004	0.0063	0.01

		<u>Stockwell</u>		<u>Rubber Manufacturers Assoc.</u>	
		<u>WATER JET</u>	<u>DIE CUT</u>	<u>BL1</u>	<u>BL2</u>
For material thickness: .125" to 0.25"					
D i m e n s i o n	Under 0.50"	+/- .010	+/- .020	+/- .025	+/- .032
	0.50 to 0.99"	+/- .015	+/- .025	+/- .025	+/- .032
	1.0 to 6.3"	+/- .015	+/- .032	+/- .032	+/- .040
	over 6.3" multiply by	0.0025	0.005	0.0063	0.01

		<u>Stockwell</u>		<u>Rubber Manufacturers Assoc.</u>	
		<u>WATER JET</u>	<u>DIE CUT</u>	<u>BL1</u>	<u>BL2</u>
For material thickness: 0.24 to 0.50"					
D i m e n s i o n	Under 0.50"	+/- .010	+/- .020	+/- .032	+/- .040
	0.50 to 0.99"	+/- .015	+/- .025	+/- .032	+/- .040
	1.0 to 6.3"	+/- .015	+/- .032	+/- .040	+/- .050
	over 6.3" multiply by	0.0025	0.005	0.0063	0.01

		<u>Stockwell</u>		<u>Rubber Manufacturers Assoc.</u>	
		<u>WATER JET</u>	<u>DIE CUT</u>	<u>BL1</u>	<u>BL2</u>
For material thickness: over 0.50"					
D i m e n s i o n	Under 0.50"	+/- .015	+/- .032	+/- .040	+/- .050
	0.50 to 0.99"	+/- .015	+/- .040	+/- .040	+/- .050
	1.0 to 6.3"	+/- .020	+/- .050	+/- .050	+/- .063
	over 6.3" multiply by	0.003	0.0063	0.0063	0.01

Stockwell, Die Cut - represents Stockwell Rubber Company's capability based on die cutting adhesive backed cellular elastomeric materials with closed end steel rule cutting dies. The cutting dies are made by laser burning the pattern into hard wood, and bending steel rule and installing punches. Steel Rule dies are produced to +/- .010". Minimum hole diameter is .062" and hole diameters must be greater than the thickness of the material.

Stockwell, Water Jet - represents Stockwell Rubber Company's capability based on water jet cutting adhesive backed cellular elastomeric materials.

Rubber Manufactures Assoc., BL1 and BL2 - are from Rubber Manufacturers Association Table 35, for designing components fabricated from cellular elastomeric materials.

Factors involved in dimensional variation - variation in finished die cut dimensions include variation, material thickness density of the material and tooling condition. Edge concavity is more noticable as thickness increases. This is caused by the squeezing of the material by the pressure of the cutting die. Narrow Flange widths, especially less than the thickness of the material, are prone to excessive edge concavity.

Water Jet Cutting generally results in minimal edge concavity. Stockwell Rubber Company uses non-abrasive water, which permits the use of the smallest jet opening for accurate cutting.