



## TOGGLE BOLTS

Anchor Size	Thread Size	Drill Bit Size	M		S		R		D		W	Performance Information					
			Mushroom Head Height		Mushroom Head Diameter		Round Head Height		Round Head Diameter			Wing Clearance	In 1/2" Wallboard		In Hollow Block		
			Max	Min	Max	Min	Max	Min	Max	Min			Tensile (lbs.)	Shear (lbs.)	Embedment Depth	Tensile (lbs.)	Shear (lbs.)
1/8	6-32	3/8	.097	.072	.270	.256	.103	.091	.260	.240	1-1/16	200	205	3/8	310	270	
3/16	10-24	1/2	.133	.099	.373	.357	.137	.123	.359	.334	1-3/8	245	280	1/2	430	700	
1/4	1/4-20	5/8	.175	.130	.492	.473	.175	.160	.472	.443	1-1/2	310	350	5/8	830	1390	
5/16	5/16-18	7/8	.218	.162	.615	.594	.216	.198	.590	.557	2-1/8	330	420	7/8	1070	2980	
3/8	3/8-16	7/8	.261	.195	.740	.716	.256	.237	.708	.670	2-1/8	340	440	7/8	1385	3120	
1/2	1/2-13	1-1/4	.348	.260	.987	.958	.355	.332	.813	.766	3	435	470	1-1/4	2550	3620	

<b>Description</b>	A fastening system consisting of (1) two matching steel "wings" each bent at two 90° angles, (2) an internally threaded nut with protrusions spaced 180° apart which serves as a pivot attaching the two wings, (3) a wire spring providing the necessary tension to open and close the wings, and (4) a machine screw which mates with the nut.
<b>Applications/Advantages</b>	Toggle bolts are light-duty anchors for use in hollow block or gypsum wallboard. They spread the load over a larger area and are more temperature resistant than other hollow wall anchors. They are single-use anchors.
<b>Material</b>	Wing Body: AISI 1008-1010 or equivalent cold rolled steel Trunnion Nut: 1/4 thr 3/8": AISI 1010 steel: 1/2": Zamac alloy Screw: carbon steel
<b>Tensile and Shear Strengths</b>	Ultimate load capacities for toggle bolts in various materials are listed in the above table. The suggested safe working load is 1/4 the loads listed here.
<b>Plating</b>	Toggle bolts are commonly supplied with a clear zinc finish.