

5 Western Digital Product Mounting Guidance

5.1 Tapped depth, fastener penetration, and thread engagement

Per SFF-8300 rev 2.4, all mounting holes must be tapped per 6-32UNC-2B, with depths and penetrations listed in Table 1 below in comparison to various Western Digital products.

Table 1. Side and Bottom Mounts Minimum thread depth and max fastener penetration for different Western Digital products

		SFF-8300 rev 2.4 Section 3.2		1 to 3 disk		4 disk		5 disk		≥7 disk	
		Side	Bottom	Side	Bottom	Side	Bottom	Side	Bottom	Side	Bottom
Min Thread Depth	threads	3	3	3.4	8.0	3.5	5.0	3.5	3.8	3.8	4.8
	mm	2.38	2.38	2.70	6.35	2.77	4.00	2.77	3.02	3.02	3.80
Max Fastener Penetration	threads	3.8	3.8	8.0	8.0	7.9	5.0	7.9	3.8	7.7	4.8
	mm	3.02	3.02	6.32	6.35	6.3	4.00	6.3	3.02	6.10	3.80

Industry form factor does not specify the minimum required thread engagement, but recommended screw lengths are included in Table 2 below.

Note: Using the screw length guidance in Table 2 based on sheet metal thickness, these screw options will work for all side and bottom mount applications as well as alternate locations.

Table 2. Recommended screw lengths for 6-32UNC mounting screws for given sheet metal thicknesses

Sheet Metal Thickness		Screw length	Engagement (in threads)
inches	mm	inches	
.006" to .038"	0.16 to 0.95	1/8"	2.8 to 3.8
.038" to .069"	0.95 to 1.75	** 5/32"	2.8 to 3.8
.069" to .100"	1.75 to 2.54	3/16"	2.8 to 3.8
.100" to .131"	2.54 to 3.33	** 7/32"	2.8 to 3.8
.131" to .163"	3.33 to 4.13	¼"	2.8 to 3.8

*** Denotes less common screw lengths*

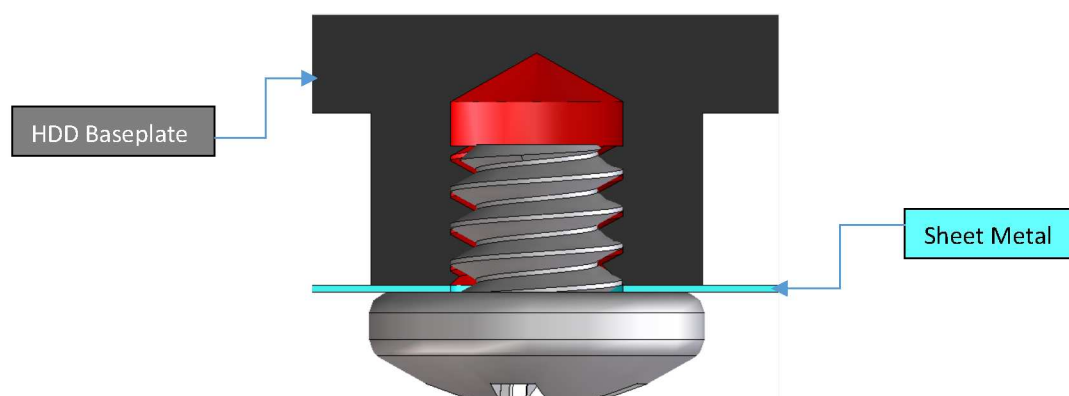


Figure 6. Bottom mount hole, 6-32UNC X 1/8" (3.8 threads engagement)

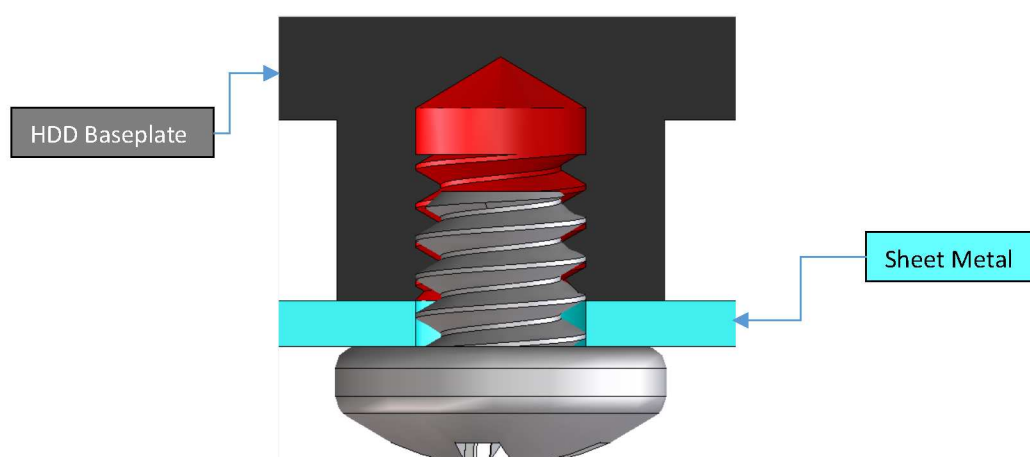


Figure 7. Bottom mount hole, 6-32UNC X 1/8" (2.8 threads engagement)

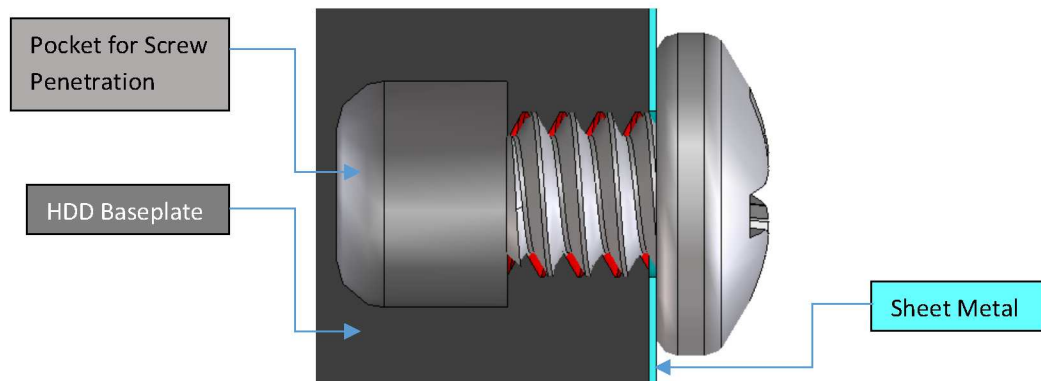


Figure 8. Side mount hole, 6-32UNC x 1/8" (3.8 threads engagement)

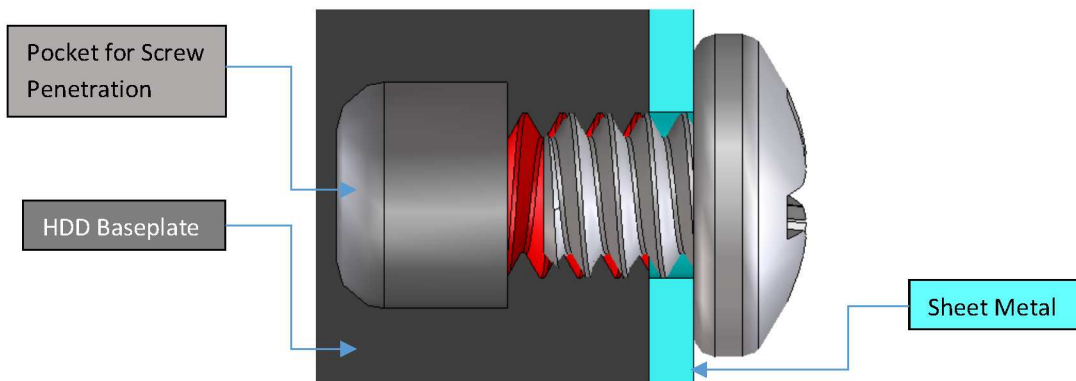


Figure 9. Option 2 – Side mount hole, 6-32UNC X 1/8" (2.8 threads engagement)

Appendix A

For further information on the 3.5-inch form factor, go to <http://ta.snia.org>.

Acknowledgments

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May Kung	Shahriar Tafreshi

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