

Hole sizes for screws!

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Let's say while working on your latest bird you need a clearance hole for a machine screw. Ever wonder how you could figure out the diameter of the screw and its clearance hole without having to measure the screw or look things up in a chart? Well the size of the screw's major diameter is determined by a very simple formula. Just write this down on one of your work cabinet doors and you'll be able to figure out any screw size from a no 1 up to a no 12.

Here's the formula: Screw Dia = (no. X .013) + .060

So..... for a 4-40 screw it's major dia is $(4 \times .013) + .060 = .112$

for a 2-56 screw it's major dia is $(2 \times .013) + .060 = .086$ and so on.....

If you do not have a clearance hole chart, and need to know the clearance, just add 3X the screw size in number (in thousandths).

Examples:

A clearance hole for a no 2 screw would be $.086 + (3 \times .002) = .092$ (use .093 drill)

A clearance hole for a no 4 screw would be $.112 + (3 \times .004) = .124$ (use .125 drill)

After all the calculations just use the nearest standard drill to the final number. Hope you find this relatively simple and useful.

Just in case you're too lazy to figure things out, here's a simple chart.....

<u>Screw size</u>	<u>major diameter</u>	<u>clearance hole</u>
2	.086	.092 (use .093 = 3/32)
4	.112	.125 (use .125 = 1/8)
6	.138	.156 (use .156 = 5/32)
8	.164	.188 (use .187 = 3/16)
10	.190	.210 (use .203 = 13/64 OR .218 = 7/32)
12	.216	.246 (use .250 = 1/4)

Fraction sized screws would use the following:

1/4	.250	.281 (use .281 = 9/32)
5/16	.312	.328 (use .328 = 21/64)
3/8	.375	.390 (use .390 = 25/64 OR .406 = 13/32)