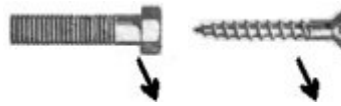
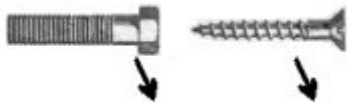


Drilling and Tapping Information Chart

Self Tapping Screws



Drill this size hole		To tap for this size bolt or screw	For this size wood screw pilot in hard wood
Drill size	Dec. equiv.		
60	.0400		
59	.0410		
58	.0420		
57	.0430		
56	.0465	0-80	
3/64	.0469		
55	.0520		
54	.0550	1-56	#3
53	.0595	1-64/72	
1/16	.0625		
52	.0635		#4
51	.0670		
50	.0700	2-56/64	
49	.0730		#5
48	.0760		
5/64	.0781		
47	.0785	3-48	#6
46	.0810		
45	.0820	3-56	
44	.0860	4-36	#7
43	.0890	4-40	
42	.0935	4-48	
3/32	.0937		
41	.0960		
40	.0980	5-36	#8
39	.0995		

Drill this size hole		To tap for this size bolt or screw	For this size wood screw pilot in hard wood
Drill size	Dec. equiv.		
12	.1890		
11	.1910		
10	.1935	14-20	
9	.1960		
8	.1990		
7	.2010	1/4-20	
13/64	.2031		
6	.2040		
5	.2055		
4	.2090	1/4-24	#20
3	.2130	1/4-28	
7/32	.2187	1/4-32	
2	.2210		
1	.2280		#24
A	.2340		
15/64	.2344		
B	.2380		
C	.2420		
D	.2460		
1/4	.2500		
E	.2500		
F	.2570	5/16-18	
G	.2610		
17/64	.2656	5/16-18*	
H	.2660		
I	.2720	5/16-24	

Screw size	Metal thickness		Type A-AB Sharp point
	Gauge	Inches	Use drill
# 4 (.112")	28	.016	44
	26	.019	44
	24	.025	42
	22	.031	42
	20	.038	40
# 6 (.138")	28	.016	39
	26	.019	39
	24	.025	39
	22	.031	38
	20	.038	36
# 7 (.155")	28	.016	37
	26	.019	37
	24	.025	35
	22	.031	33
	20	.038	32
# 8 (.165")	26	.019	33
	24	.025	33
	22	.031	32
	20	.038	31
	18	.050	30
# 10 (.191")	26	.019	30
	24	.025	30
	22	.031	30
	20	.038	29
	18	.050	25
# 12 (.218")	24	.025	26
	22	.031	25
	20	.038	24
	18	.050	22
# 14 (.251")	24	.025	15
	22	.031	12
	20	.038	11
	18	.050	9

Type B



Screw size	Metal thickness	Type B

38	.1015	5-40	
37	.1040	5-44	#9
36	.1069		
7/64	.1094		
35	.1100	6-32	
34	.1110	6-36	
33	.1130	6-40	#10
32	.1160		
31	.1200	6-48	#11
1/8	.1250	7-36	
30	.1285	8-30	#12
29	.1360	8-32/36	
28	.1405	8-40	
9/64	.1406		
27	.1440	9-30	
26	.1470	3/16-24	
25	.1495	10-24	#14
24	.1520		
23	.1540	10-28	
5/32	.1562		
22	.1570	10-30	
21	.1590	10-32	
20	.1610	3/16-32	
19	.1660		
18	.1695		#16
11/64	.1719		
17	.1730		
16	.1770	12-24	
15	.1800		
14	.1820	12-28	
13	.1850	12-32	#18
3/16	.1875		

J	.2770		
K	.2810		
9/32	.2812	5/16-24/32	
L	.2900		
M	.2950		
19/64	.2969		
N	.3020		
5/16	.3125	3/8-16 ; 1/8 NPT	
O	.3160		
P	.3230		
21/64	.3281	3/8-20/24	
Q	.3332		
R	.3390		
11/32	.3437		
S	.3480		
T	.3580		
23/64	.3594		
U	.3680		
3/8	.3750	7/16-14	
V	.3770		
W	.3869		
23/64	.3906	7/16-20	
X	.3970		
Y	.4040		
13/32	.4062		
Z	.4130		
27/64	.4129	1/2-12/13	
7/16	.4375	1/4 NPT	
29/64	.4531	1/2-20/24	
15/32	.4687	1/2-27	
31/64	.4844	9/16-12	
1/2	.5000		

			Blunt point
	Gauge	Inches	Use drill
# 4 (.112")	28	.016	44
	26	.019	44
	24	.025	43
	22	.031	42
	20	.038	42
# 6 (.137")	28	.016	37
	26	.019	37
	24	.025	36
	22	.031	36
	20	.038	35
# 7 (.151")	26	.019	32
	24	.025	32
	22	.031	32
	20	.038	32
	18	.050	31
# 8 (.163")	26	.019	32
	24	.025	32
	22	.031	32
	20	.038	32
	18	.050	30
# 10 (.186")	26	.019	27
	24	.025	27
	22	.031	27
	20	.038	27
	18	.050	27
# 12 (.212")	24	.025	19
	22	.031	19
	20	.038	19
	18	.050	18
1/4" (.243")	22	.031	13
	20	.038	13
	18	.050	11
	16	.063	8

*All tap drill sizes are for 75% full thread except asterisked sizes which are 60% full thread.

Common thread sizes are in bold, and the associated thread types are color coded **National Coarse (NC)** and **National Fine (NF)** or **SAE**

An excellent discussion of various thread standards can be seen at www.sizes.com/tools/thread_screw.htm.