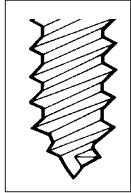
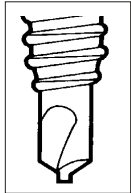


SELF-DRILLING SCREWS

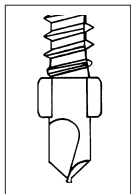
POINT STYLES



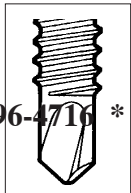
TWINFAST
A special point for fastening drywall to 26 gauge metal studs or wood.



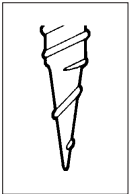
STITCH
Special under-size drill point for thin metals. # 1 Point



WING
Special point for attaching thick wood to metal. "Wings" act as counterbore. Needs 16 ga. steel to be "broken off".



SELF-DRILLING
For fastening light to medium gauge metals or wood to metal.



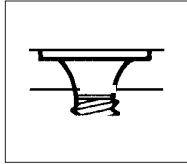
SPOILER
Sharp point designed to quickly penetrate metal studs up to 22 gauge.



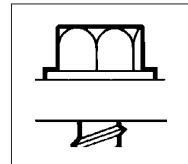
DEFINITION

A self-drilling fastener drills, taps, and fastens in a single, three part operation.

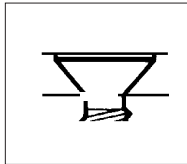
HEAD STYLES



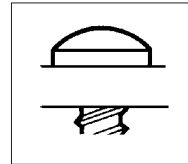
PHILLIPS WAFER
Large head provides a large bearing surface to fasten plywood and other soft materials.



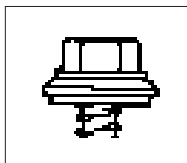
INDENTED HEX WASHER
Washer face provides bearing surface for driving sockets.



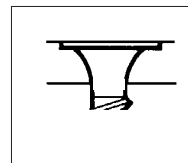
PHILLIPS FLAT
Used primarily in wood to countersink and seat flush without splintering.



PHILLIPS PAN
Conventional head for general applications.



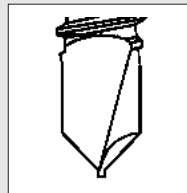
SEALING WASHER
Used for leak proof outdoor applications.



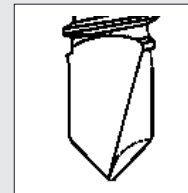
PHILLIPS BUGLE
Used mainly in drywall applications. Seats flush without crushing materials.

, MD * 800-796-4716 * www.whattogetonline.com

POINT TYPES



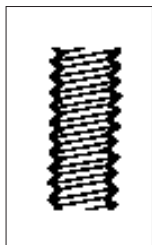
MILLED
Point is made by cutting away material which gives it a sharper cutting flute. This generally allows it to drill faster and deeper.



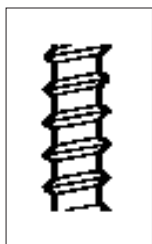
FORGED
Point is made by a stamping process which gives the point strength but limited sharpness. Generally used for thin metals.

Which is better ? It really depends on the quality of the product.
Is the manufacturer delivering good performance or a cheap price ?

THREAD TYPES



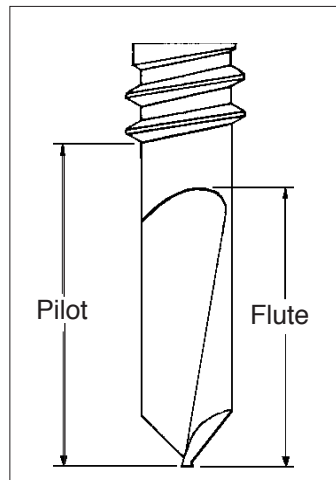
FINE
Used to reduce friction and driving torques in thicker materials.



SPACED or COARSE
Used for fast installation in thinner materials. High holding power and more resistance to strip-out.

DRILL FLUTE & PILOT LENGTH

PILOT LENGTH
The unthreaded section from the point to the first thread. It should be long enough to assure that the drilling action is complete before the first thread engages metal. Screw threads advance at 10 times the rate that a drill can remove metal. If the fastener is still drilling when the threading starts "jacking" will occur which can cause point failure.

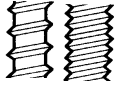


DRILL FLUTE
The length of the drill flute determines the metal thickness that can be drilled. The flute provides a channel for chip removal during the drilling action. If the flute is less than the thickness of the material, drill chips will be trapped in the flute and cutting will stop. This will cause the point to burn or break.

FASTENER SELECTION GUIDE



HEAD STYLE: Determine if the head style chosen will ensure stability during driving, and give the desired finished appearance and corrosion resistance.



THREAD DIAMETER & TYPE: Make sure that the choice of threads will provide good connection strength. Use "Recommended Material Thickness" column in chart below.



PILOT LENGTH: Make sure that the drilling operation will be completed before the threading operation begins.

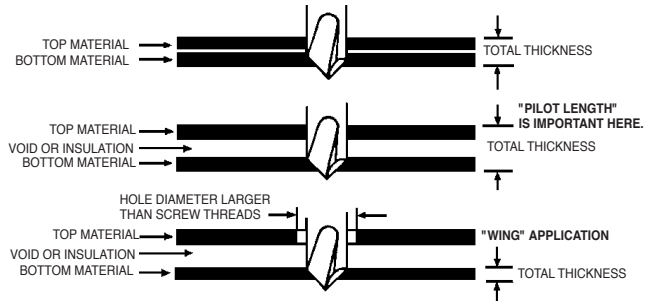


FLUTE LENGTH: Use the "Point Length" column in the chart below to determine if the point length is long enough.



USE THE RIGHT TOOL: A 1900 to 2500 RPM screwgun rated at 4.5 to 5 amps or more, with a properly adjusted depth-limiting nosepiece must be used for the best fastening results.

MATERIAL TO BE DRILLED



DECIMAL EQUIVALENTS OF STANDARD GAUGES OF SHEET STEEL & ALUMINIUM

NUMBER OF GAUGE	ALUMINIUM	SHEET STEEL
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NUMBER OF GAUGE	ALUMINIUM	SHEET STEEL
000000	.580
00000	.5165
0000	.4600	.4062
000	.4096	.375
00	.3648	.3437
0	.3249	.3125
1	.2893	.2812
2	.2576	.2656
3	.2294	.2391
4	.2043	.2242
5	.1819	.2092
6	.1620	.1943
7	.1443	.1793
8	.1285	.1644
9	.1144	.1495
10	.1019	.1345
11	.0907	.1196
12	.0808	.1046
13	.0720	.0897
14	.0641	.0747
15	.0571	.0673
16	.0508	.0598
17	.0453	.0538
18	.0403	.0478
19	.0359	.0418
20	.0320	.0359
21	.0285	.0329
22	.0253	.0299
23	.0226	.0269
24	.0201	.0239
25	.0179	.0209
26	.0159	.0179
27	.0142	.0164
28	.0126	.0149
29	.0113	.0135
30	.0100	.0120
31	.0089	.0105
32	.0080	.0097
33	.0071	.0090
34	.0063	.0082
35	.0056	.0075
36	.0050	.0067
37	.0045	.0064
38	.0040	.0060

PLATING - COATINGS - FINISH

ZINC - Most common form of corrosion protection. "Commercial" zinc is electrically applied to a thickness of .00015 to .0002".

CADMIUM - A significantly better coating than zinc in salt environments with excellent lubricity. Applied electrically to a thickness of .0003 to .0005". Cadmium has become very rare in recent years because of EPA regulations concerning disposal of it's plating by-products.

MECHANICAL or PEEN - Utilizes glass balls or beads to mechanically pound a coating of zinc on to the fastener to an approximate thickness of .0066". Equal to "Hot Dip" Galvanizing.

COATINGS - Newest and most significant improvement in corrosion protection. IE Stalgard - Climaseal. These coatings are applied like paint over a zinc plated fastener and offer a superior form of protection.

TO USE	DIAMETER	RECOMMENDED MATERIAL THICKNESS	POINT LENGTH
<p>TYPE 2</p>	NO. 4	.035 TO .080	.140
	NO. 6	.035 TO .090	.140
	NO. 8	.035 TO .100	.156
	NO.10	.035 TO .110	.203
	NO. 12	.035 TO .187	.234
	1/4"	.035 TO .175	.296
<p>TYPE 3</p>	NO. 6	.090 TO .110	.171
	NO. 8	.100 TO .140	.203
	NO. 10	.110 TO .175	.250
	NO. 12	.110 TO .210	.281
	1/4"	.110 TO .220	.312
<p>TYPE 4</p>	NO. 11	.175 TO .312	.387
	NO. 12	.210 TO .375	.437
	1/4"	.250 TO .375	.468
	<p>DRIL-IT®</p> <p>TYPE 5</p>	NO.12	.250 TO .500

THE MOST IMPORTANT CONSIDERATIONS !

* WHAT IS THE APPLICATION ?

* WHAT ARE THE MATERIALS ?

* IS IT WOOD TO METAL ?

How thick is the wood ? How thick is the steel ?

Should a winged fastener be used ?

* IS ALUMINIUM INVOLVED ?