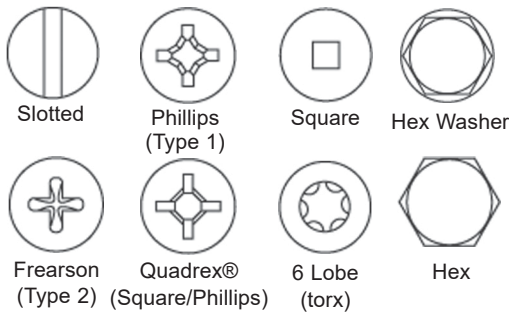


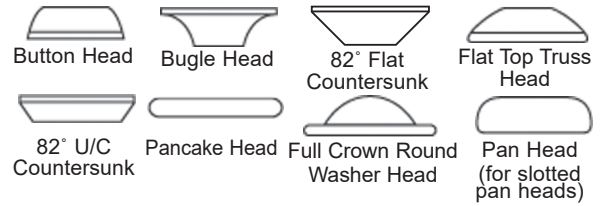
FASTENING TIPS

This handy reference sheet provides important information that helps you in selecting a fastener. Please call our local service center at 800.486.1832 for all of your fastening system needs.

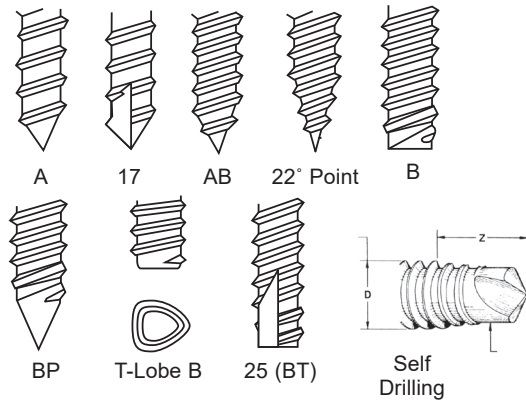
Drives



Head Styles



Point Styles



Tooling | Installation



Screw-gun RPM

Carbon Steel & 410SS Screws: 2,500 RPM maximum
304 Stainless Steel Screws: 1,000 RPM maximum
For optimal performance, use screw-guns with torque control feature.
DO NOT OVER-TORQUE FASTENERS.

Installation Tips

- A minimum of three (3) factors of safety should be used for most self-drilling or self-tapping fasteners. Consult a design professional for appropriate values.
- Install fastener perpendicular to the work surface and tighten to no more than approximately 70% of the torsional strength.
- Allow at least three full threads to extend beyond the material. For wood applications, allow 1" minimum embedment or full thread embedment in plywood and OSB for optimal pullout resistance.

NOTE: DO NOT USE IMPACT TOOLS OR THE FASTENER CAN FAIL!

Fastener Material Selection Based on the Galvanic Series of Metals

Table developed using information supplied by AISI Committee of Stainless Steel Producers.

		FASTENER MATERIAL			
		STEEL Zinc Plated	STAINLESS STEEL Type 410	STAINLESS STEEL Type 302, 304, 316	ALUMINUM
BASE METAL	Zinc Galvanized ZN/Al Coated Steel	A	C	C	B
	Aluminum	A	Not Recommended	B	A
	Steel / Cast Iron	A,D	C	B	A
	Brass, Copper, Bronze	A,D,E	A	B	A,E
	Stainless Steel 300 Series	A,D,E	A	A	A,E

Key

- A. The corrosion of the base metal is not increased by the fastener.
- B. The corrosion of the base metal is slightly increased by the fastener.
- C. The corrosion of the base metal may be considerably increased by the fastener material.
- D. The plating on the fastener is rapidly consumed.
- E. The corrosion of the fastener is increased by the base metal.

Footnotes

1. Because aluminum can expand a large distance, the high hardness of 410 SS case harden screws may lead to screw to failure due to lack of ductility or stress corrosion cracking.

NOTE: Organic coating to the screw will improve the corrosion resistance. Environments can affect the rate of corrosion and change the activity of the metals.

Gauges | Metric Conversion

English to Metric	Formula to Use
Decimal to Millimeters	Decimal x 25.4
PSI to Newton / Millimeters ²	PSI x .007
Pounds Force to Newtons	Pounds Force x 4.448

Gauge Thickness	Decimal	Metric
29 GA	.013"	.33mm
28 GA	.015"	.38mm
26 GA	.018"	.46mm
24 GA	.024"	.61mm
22 GA	.030"	.76mm
20 GA	.036"	.91mm
18 GA	.048"	1.22mm
16 GA	.060"	1.52mm
14 GA	.075"	1.91mm
12 GA	.105"	2.67mm
1/8"	.125"	3.18mm
10 GA	.135"	3.43mm
1/4"	.250"	6.35mm
5/16"	.312"	7.92mm
3/8"	.375"	9.53mm
1/2"	.500"	12.7mm