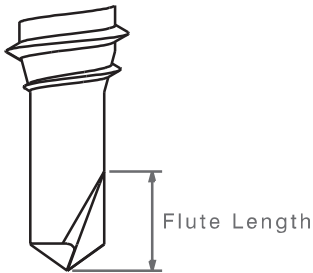


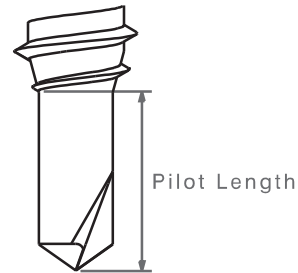
drill point selection guide



Nomenclature



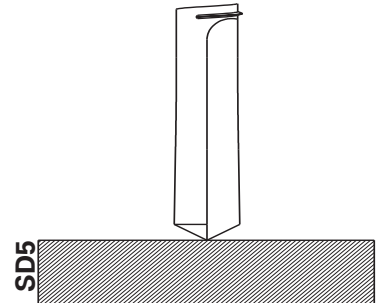
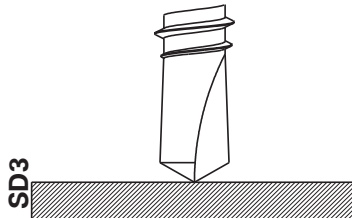
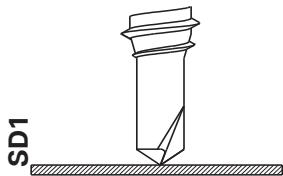
The flute is the cutout channel on the drill point of the fastener. Its primary function is to remove metal chips during the drilling process. The length of the flute should be greater than the thickness of the metal substrate to be drilled.



The pilot is the unthreaded section of the fastener from the point to the first thread. Typically, the pilot length should be greater than the thickness of the top material to be drilled. This ensures that all drilling is complete before thread engagement.

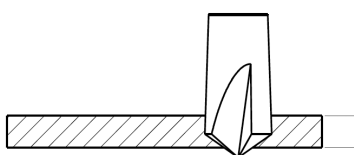
Drill Point Diameter

The drill point diameter determines the panel thickness that can be drilled by any given fastener. As a general rule of thumb, larger point diameters can drill into thicker metal panels. In order to trivialize selection, a numbered system is utilized to reference point diameter. SD1 refers to the smallest point diameter. As the number proceeding, "SD" increases the size of the point diameter also increases.

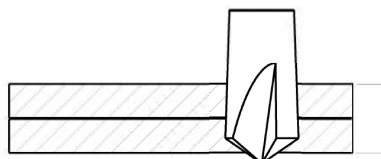


Drill Capacity

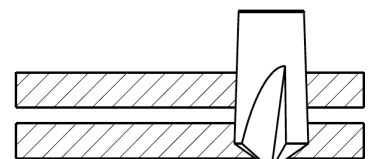
Drill capacity refers to the maximum panel thickness that can be drilled by any given fastener. Below are three common panel configurations. Note that the void space in the spaced panel configuration can consist of empty space, butyl, or insulation.



Single Panel



Double Panel



Spaced Panel



Drill Capacity Chart

Drill Point	SD1	SD2	SD3	SD4	SD5				
0.5									
0.4				0.375					
0.3				0.312					
0.2			0.210	0.210					
0.1	0.100	0.100	0.150	0.135					
Fastener Diameter	#14	#8	#14	#10	#12	#14	#12	#14	#14

The chart above references drill capacity for a number of fasteners provided by SFS. Note that the information in this chart is subject to change at any time. Please reference SFS spec sheets for the most up to date drill capacity values.

Fastener Diameter Conversion

Nominal Diameter	#8	#9	#10	#12	#14	#17
Decimal Equivalent (in)	0.165	0.181	0.19	0.216	0.25	0.291
Decimal Equivalent (mm)	4.19	4.6	4.83	5.49	6.35	7.39

Steel Gauge Conversion

Gauge	30	29	28	26	24	22	20	18	16	14	12	1/8"
Decimal Equivalent (in)	0.012	0.014	0.015	0.018	0.024	0.03	0.036	0.048	0.060	0.075	0.105	0.125
Decimal Equivalent (mm)	0.30	0.36	0.38	0.46	0.61	0.76	0.91	1.22	1.52	1.91	2.67	3.18