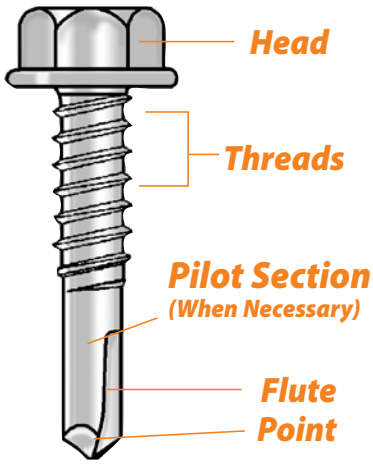
ITW Buildex

TEKS® Fastening Features

FEATURES



HEAD
Proper head style choice will ensure stability during driving, proper clamping and desired finished appearance.

THREAD FORM AND DIAMETER
The correct choice of thread form and diameter optimizes low installation torque with high pullout strength.

PILOT SECTION
The unthreaded portion of the point assures the drilling of the steel is completed before the threads begin tapping into the drilled hole.

POINT
The point is designed to efficiently remove material and precisely size the hole for the thread.

FINISH
Platings and coatings provide lubricity during drilling and tapping as well as corrosion resistance.

FASTENER DESCRIPTION AND BREAKDOWN — EXAMPLE

10	-	16	x	3/4"	HWH	Teks/3
Nominal Screw Size		Threads Per Inch		Screw Length	Head Style	Drill Point Type

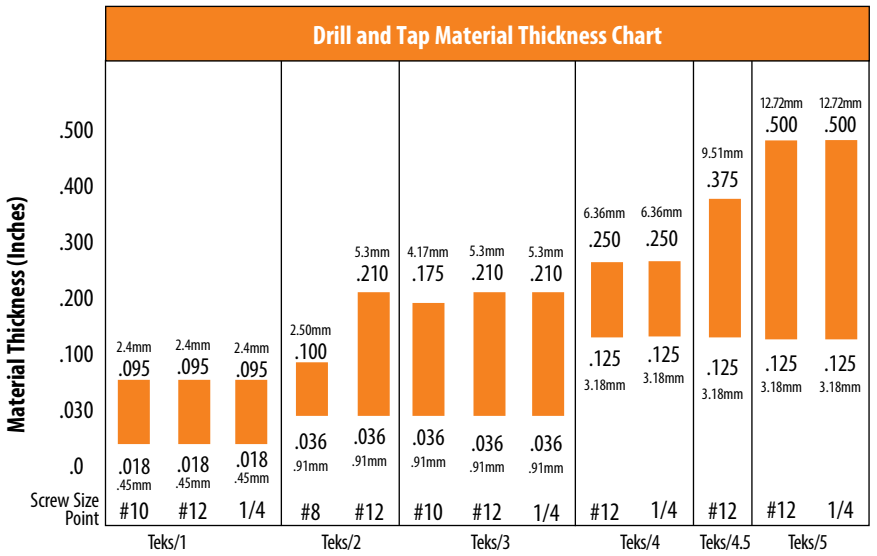
Nominal Screw Sizes

Thread Diameter	Decimal Equivalent
#6	.140
#7	.150
#8	.160
#9	.180
#10	.190
#11	.200
#12	.210
#13	.230
#14	.240
1/4	.250
#17	.286

Steel Gauge Chart

Common Sheet Steel Gauges	Decimal Eq.	
	Inches	MM
30	.012	.30
28	.015	.38
26	.018	.45
24	.024	.61
22	.030	.76
20	.036	.91
18	.048	1.21
16	.060	1.52
14	.075	1.90
12	.105	2.65
1/8	.125	3.18
10	.134	3.42
3/16	.187	4.77
1/4	.250	6.36
1/2	.500	12.72

Drill and Tap Material Thickness Chart



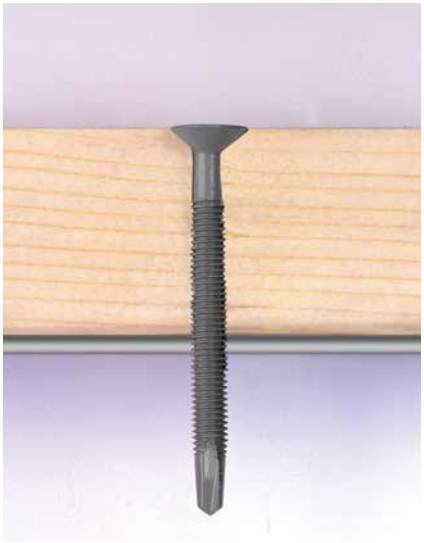
*Drill & tap capacities may vary with special feature designs.
Refer to product reports for specifics.

ITW Construction Products
Call our toll free number **800-387-9692** or visit **www.itwconstruction.ca** for general information.
Visit ITW Buildex's web site **www.itwbuildex.com** for the most current product and technical information.

ITW Buildex

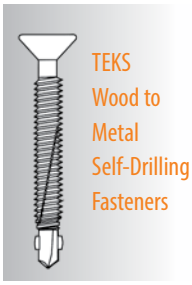
TEKS® Wood to Metal Fasteners

No Pre-Drilling, Fast, Efficient Attachment of Wood-To-Metal



DESCRIPTION/ADVANTAGES

Wood-To-Metal Applications—



TEKS Wood to Metal Self-Drilling Fasteners

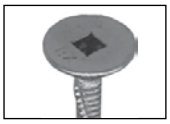
- Point has precise cutting edges to improve drill performance with less effort.
- Special winged fasteners ream a hole in wood preventing thread engagement during drilling.
- Wafer head design has a large bearing surface ideal for plywood.
- Flat head design countersinks and seats flush in wood.
- Gray Spex™ finish provides excellent corrosion resistance and lower tapping torque.
- Compatible with ACQ treated wood.

SPECIFICATIONS

Diameter / Thread Form

10-24
12-14
1/4-20

Head Styles

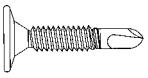


Socket Wafer Head (SW)

Philips Flat Head (PFH)

Drill Point

Teks 3



Teks 4

Finish

Type	Kesternich Results (DIN 50018, 2.0L)	Salt Spray Results (ASTM B117)
Electro-zinc (EZ)	3 cycles - 5% or less red rust	48 hours - 5% or less red rust
Grey Specx	15 cycles - 5% or less red rust	300 hours - 10% or less red rust

INSTALLATION INSTRUCTIONS

1. A standard screwgun with a depth sensitive nosepiece should be used to install Teks. For optimal fastener performance, the screwgun should be a minimum of 6 amps and have an RPM range of 0-2500.
2. Adjust the screwgun nosepiece to properly seat the fastener.
3. Worn or damaged bit tip should be replaced.
4. The fastener is fully seated when the head is flush with the work surface.
5. Overdriving may result in torsional failure of the fastener or stripout of the substrate.
6. The fastener must penetrate beyond the metal structure a minimum of 3 pitches of thread.
7. All #10 diameter "Winged" parts must be driven into a minimum of 16 GA steel thickness.
8. All 1/4 and #12 diameter "Winged" parts must be driven into a minimum of 1/8" steel in order to break the wings consistently.

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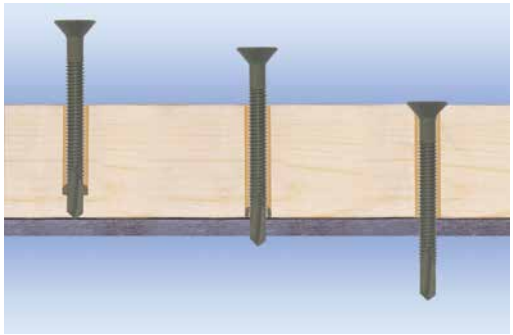
TEKS Wood-To-Metal Applications

APPLICATIONS

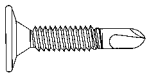
Plywood roof and floor sheet to steel frames.

2 x 4 headers to steel frames.

Plywood fascia to steel frames.

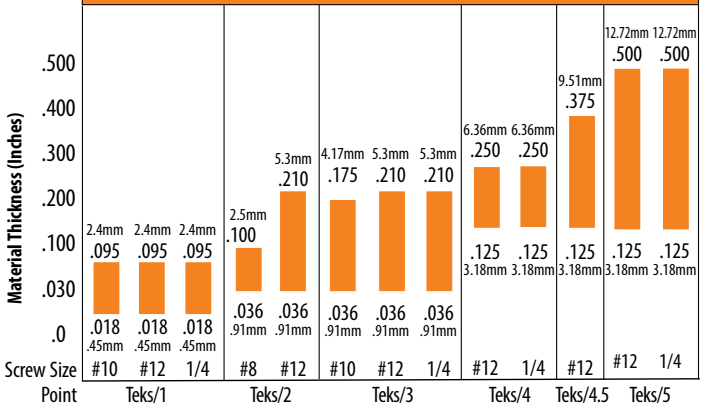


DRILL POINTS

Teks 3 

Teks 4 

Drill and Tap Material Thickness Chart

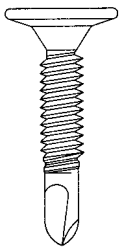


*Drill & tap capacities may vary with special feature designs. Refer to product reports for specifics.

SELECTION CHART

TEKS® Fasteners

Finish: Electro-zinc Plating. Without Wings.



PART NUMBER	REFERENCE NUMBER	DESCRIPTION	HEAD STYLE	DRILL POINT	DRILL & TAP CAPACITY	WOOD ATTACHMENT RANGE	BOX QTY	APPLICATIONS
21320	21320	10-24 x 1"	#2 SW	#3	.036-.175	1/4"-1/2"	5,000	- Plywood, mansard, fascia, roofing, flooring to steel framing
21350	21350	10-24 x 1-1/4"	#2 SW	#3	.036-.175	1/4"-3/4"	3,000	

[X] Available in X PAK [A] Available in A PAK

TEKS® Fasteners

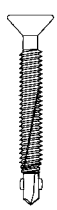
Finish: Electro-zinc Plating. With Wings.

PART NUMBER	REFERENCE NUMBER	DESCRIPTION	HEAD STYLE	DRILL POINT	DRILL & TAP CAPACITY	WOOD ATTACHMENT RANGE	BOX QTY	"P" PAK QTY	"X" PAK QTY	APPLICATIONS
21380	21380[P B]	10-24 x 1-1/2"	#2 SW	#3	.036-.175	1/4"-1"	3,000			- Plywood, 2 x 4's to steel framing
21730[P]	21730[P]	12-24 x 2"	#3 SW	#4	.125-.250	1/4" - 1"	2,000	100		
21750	21750[P]	12-24 x 2-1/2"	#3 SW	#4	.125-.250	1/4"-1-1/2"	1,500		100	
21751[P]	21751[P]	12-24 x 3"	#3 SW	#4	.125-.250	1/4"-2"	1,000		100	

[P] Available in P PAK [X] Available in X PAK

TEKS® Fasteners

Finish: Gray Spex Coating. With Wings.



PART NUMBER	REFERENCE NUMBER	DESCRIPTION	HEAD STYLE	DRILL POINT	DRILL & TAP CAPACITY	WOOD ATTACHMENT RANGE	BOX QTY	APPLICATIONS
1980	1096000	1/4-20 x 3"	#3 PFH	#4	.125-.250	3/4"-2"	1,000	- Plywood, 2 x 4's to steel framing
1092057	1092057	12-24 x 2-1/4"	#3 PFH	#4	.125-.250	3/4"- 1-3/8"	2,000	
1094056	1094056	12-24 x 2-3/4"	#3 PFH	#4	.125-.250	3/4"-2-5/8"	1,600	

TEKS Wood-To-Metal Applications

PERFORMANCE TABLES

Sheet Steel Gauges

GAUGE NO.	12	14	16	18	20	22	24	26
Nominal Decimal Equivalent (Inch)	.105	.075	.060	.048	.036	.030	.024	.018

Pullout Values
(Average Lbs. Ultimate)

FASTENER		STEEL GAUGE Lbs.)									
DIA.	PT	26	24	22	20	18	16	14	12	3/16	1/4
#10-16	3	-----	208	266	299	499	708	967	1474	-----	-----
#10-24	3	-----	-----	-----	334	495	702	900	1570	3865	4101
#12	4	-----	-----	-----	-----	-----	-----	-----	1508	4297	-----
1/4	4	-----	-----	-----	-----	-----	-----	-----	1803	-----	-----

Shear Values
(Average Lbs. Ultimate)

FASTENER		STEEL GAUGE (Lapped)					
DIA.	PT	20	18	16	14	12	1/8
#10	3	728	1266	1540	1522	-----	-----
#12	4	-----	-----	-----	-----	2048	2030
1/4	4	-----	-----	-----	-----	2650	2820

Fastener Values

FASTENER (Dia-TPI)	TENSILE (Lbs. Min)	SHEAR (Avg. Lbs. Ultimate)	TORQUE (Min. in Lbs.)
10-16	1936	1400	61
10-24	2702	1500	65
12-24	3165	2200	150
1/4-20	3860	2700	168

The values listed are ultimate averages achieved under laboratory conditions and apply to Buildex manufactured fasteners only. Appropriate safety factors should be applied to these values for design purposes.