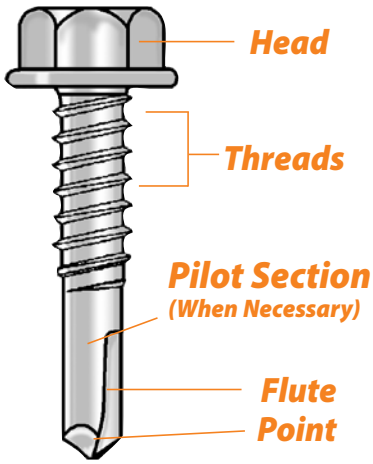
ITW Buildex

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

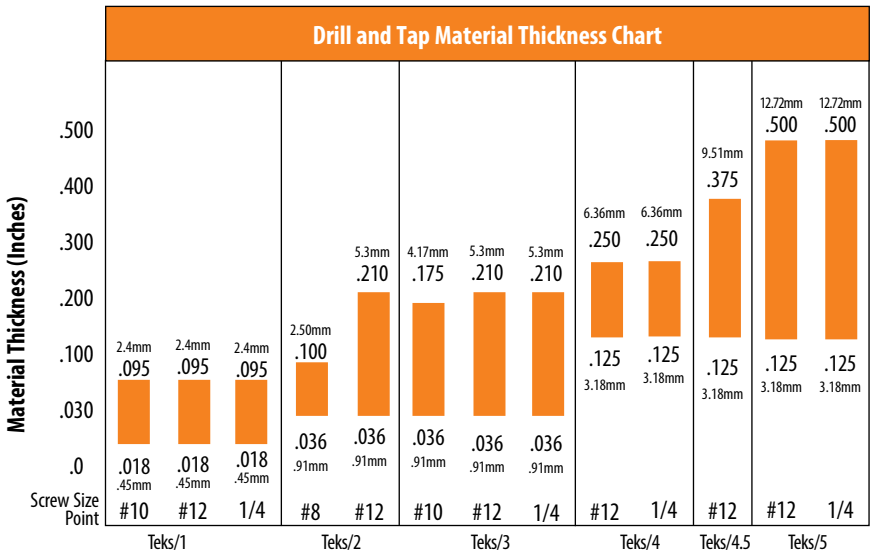
Nominal Screw Sizes

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



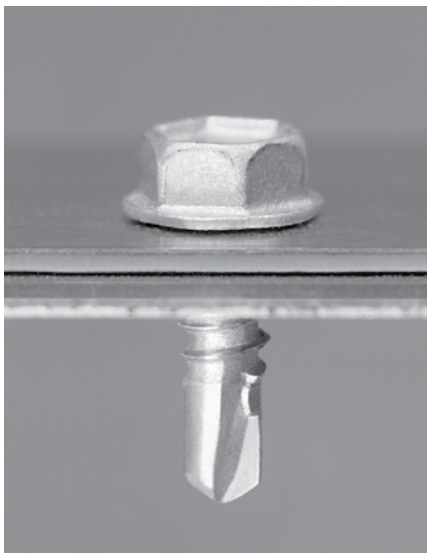
*Drill & tap capacities may vary with special feature designs.
Refer to product reports for specifics.

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® Self-Drilling Fasteners

Preferred Most by Electrical, Decking, HVAC and Metal Building Contractors



DESCRIPTION/ADVANTAGES

Light Duty Steel-To-Steel Applications—

TEKS Self-Drilling Fasteners

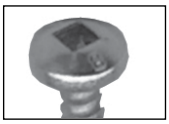
- Sharp convex drill point has precise cutting edges to improve drill performance with less effort.
- Non-walking point provides fast material engagement.
- Unique point to thread design extrudes the metal preventing stripout.
- Point to thread design maximizes pullout performance and minimizes backout.
- Three head styles available to handle various applications.
- Climaseal® finish provides excellent corrosion resistance

SPECIFICATIONS

Diameter / Thread Form
8-18 and 10-16

Head Styles

Hex Washer Head (HWH)



Socket Pan Head (SP)

Modified Truss Head (MTH)

Drill Point

Teks 2

Teks 3

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
Climaseal® Coating (CL)	30 cycles - 10% or less red rust	1000 hours - 10% or less red rust
Climaseal®+ Coating (CL+)	Meets or exceeds Kesternich and Salt Spray Results of Climaseal® Coating (CL)	

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 4 amps and have a RPM range of 0-2000.
2. Adjust the screwgun nosepiece to properly seat the fastener.
3. New magnetic sockets must be correctly set before use. Remove chip build-up as needed.
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.

TEKS Light Duty Steel-To-Steel Applications

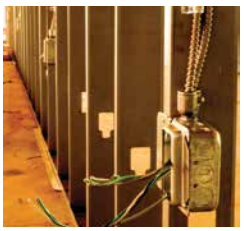
APPLICATIONS

Stitch roof deck and wall panel sidelaps.
HVAC, electrical trim accessories to steel framing.
Residential steel frame construction.
Brick ties to steel framing.
Track to stud and stud splicing.
Hat channel to stud.

APPROVALS/LISTINGS

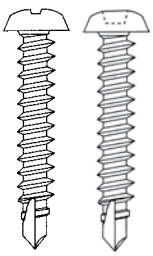
Factory Mutual (J.I. 2 X 9A2 AM)

ICC - ESR 1976



SELECTION CHART

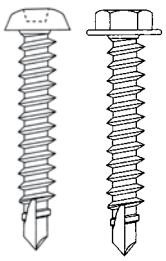
TEKS® Fasteners — Finish: Electro-Zinc Plating.



PART NUMBER	REFERENCE NUMBER	DESCRIPTION	HEAD STYLE	DRILL POINT	DRILL & TAP CAPACITY	MAX. MATERIAL ATTACHMENTS	BOX QTY	"X" PAK QTY	APPLICATIONS
2240	2240	8-18 x 1/2"	#2 SP	#2	.036-.100	.205	10,000		- HVAC, electrical trim accessories to steel framing - Residential steel frame construction - Track to stud - Hat channel to stud - Stud splicing
2250	2250	8-18 x 1/2"	MTH	#2	.036-.100	.205	10,000		
2280[X]	2280	8-18 x 5/8"	#2 SP	#2	.036-.100	.330	10,000		
2330[X]	2330[X]	8-18 x 3/4"	#2 SP	#2	.036-.100	.455	10,000	1,000	
2360[X]	2360[XA]	8-18 x 1"	#2 SP	#2	.036-.100	.705	8,000	500	
2220	2220	8-18 x 1/2"	1/4" HWH	#2	.036-.100	.205	10,000		
2310[X]	2310[XA]	8-18 x 3/4"	1/4" HWH	#2	.036-.100	.455	10,000	1,000	
2365	2365[A]	8-18 x 1"	1/4" HWH	#2	.036-.100	.705	8,000		

[P] Available in P/A PAK [X] Available in X PAK

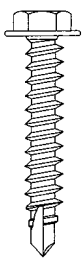
TEKS® Fasteners — Finish: Electro-Zinc Plating.



PART NUMBER	REFERENCE NUMBER	DESCRIPTION	HEAD STYLE	DRILL POINT	DRILL & TAP CAPACITY	MAX. MATERIAL ATTACHMENTS	BOX QTY	"X" PAK QTY	APPLICATIONS
2480	2480	10-16 x 3/4"	#2 SP	#3	.036-.175	.325	6,000		- Clips, duct straps, brick ties or accessories to steel framing
2490[X]	2490[X]	10-16 x 1"	#2 SP	#3	.036-.175	.575	5,000	500	
2495[X]	2495[X]	10-16 x 1-1/4"	#2 SP	#3	.036-.175	.825	4,000	250	
2400	2400	10-16 x 1/2"	5/16" HWH	#3	.036-.175	.150	6,000		
2460[X]	2460[X]	10-16 x 3/4"	5/16" HWH	#3	.036-.175	.325	6,000	500	
2510	2510	10-16 x 1"	5/16" HWH	#3	.036-.175	.575	5,000		

[P] Available in P/A PAK [X] Available in X PAK

TEKS® Fasteners — Finish: Climaseal Coating.



PART NUMBER	REFERENCE NUMBER	DESCRIPTION	HEAD STYLE	DRILL POINT	DRILL & TAP CAPACITY	MAX. MATERIAL ATTACHMENTS	BOX QTY	APPLICATIONS
1100 +	1128000	10-16 x 3/4"	5/16" HWH	#3	.036-.175	.325	5,000	- Clips, duct straps, brick ties or accessories to steel framing
1131000 +	1131000	10-16 x 1-1/2"	5/16" HWH	#3	.036-.175	.1075	3,000	
2220CL	2220CL	8-18 X 1/2"	1/4" HWH	#2	.036-.100	.205	10,000	

+ (CL+) Coating

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
#8	2	119	193	265	298	491	703	959	-----
#10-16	1	148	241	311	357	565	826	1111	1796
	3	124	208	266	299	499	708	967	1474
1/4	1	208	329	428	562	800	1151	-----	-----

Shear Values
(Average Lbs. Ultimate)

FASTENER		STEEL GAUGE (Lapped)						
DIA.	PT	26	24	22	20	18	16	14
#8	2	294	496	560	740	1060	-----	-----
#10	1	398	584	659	884	1374	-----	-----
	3	-----	455	526	728	1266	1540	1552
1/4	1	511	849	885	1244	1764	-----	-----

Fastener Values

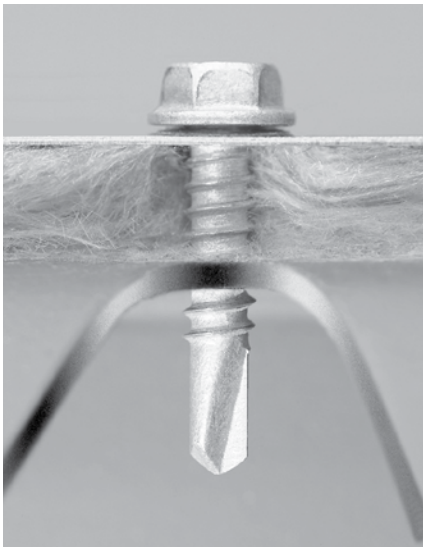
FASTENER (Dia-TPI)	TENSILE (Lbs. Min)	SHEAR (Avg. Lbs. Ultimate)	TORQUE (Min. in Lbs.)
8-18	1545	1000	42
10-16	1936	1400	61
10-24	2702	1500	65
12-14	2778	2000	92

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.

ITW Buildex

TEKS® Self-Drilling Fasteners

The Best Point Ever for Speed and Consistency



DESCRIPTION/ADVANTAGES

Medium Duty Steel-To-Steel Applications—

- Point has precise cutting edges to improve drill performance with less effort.
- Non-walking point provides fast material engagement.
- Point to thread design maximizes pullout performance and minimizes backout.
- Drills and taps in the broadest range of applications.
- Climaseal® finish provides excellent corrosion resistance and lower tapping torque.

SPECIFICATIONS

Diameter / Thread Form

10-16
12-14
1/4-14

Head Style

Hex Washer Head
(HWH)

Drill Point

Teks 2

Teks 3

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
Climaseal® Coating (CL)	30 cycles - 10% or less red rust	1000 hours - 10% or less red rust
Climaseal®+ Coating (CL+)	Meets or exceeds Kesternich and Salt Spray Results of Climaseal® Coating (CL)	

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 a RPM range of 0-2500.
2. Adjust the screwgun nosepiece to properly seat the fastener.
3. New magnetic sockets must be correctly set before use. Remove chip build-up as needed.
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.

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.

TEKS Medium Duty Steel-To-Steel Applications

APPLICATIONS

Roof deck to steel framing.

Wall panel to girt.

Duct work to steel framing.

Accessories to steel framing

Clip to steel framing.

Retrofit framing.

APPROVALS/LISTINGS

Factory Mutual (J.I. 2 X 9A2 AM)

ICC - ESR 1976

DRILL POINTS

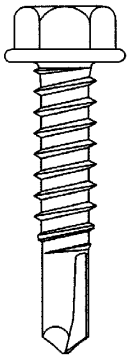
Teks 2

Teks 3

SELECTION CHART

TEKS® Fasteners

Finish: Climaseal Coating.

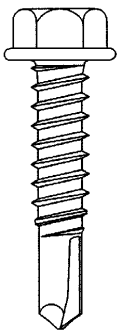


PART NUMBER	REFERENCE NUMBER	DESCRIPTION	HEAD STYLE	DRILL POINT	DRILL & TAP CAPACITY	MAX. MATERIAL ATTACHMENTS	BOX QTY	APPLICATIONS
1420	1134000	12-14 x 3/4"	5/16" HWH	#3	.036-.210	.270	5,000	- Duct work to steel framing - Accessories to steel framing - Clip to steel framing
1136000	1136000 P	12-14 x 1"	5/16" HWH	#3	.036-.210	.520	4,000	
1590 +	1123000	12-14 x 1-1/2"	5/16" HWH	#2	.036-.210	.800	2,500	
1620 +	1140000	12-14 x 2"	5/16" HWH	#3	.036-.210	1.450	2,000	
1820 +	1147000	1/4-14 x 3/4"	3/8" HWH	#3	.036-.210	.270	3,000	- Duct work to steel framing - Accessories to steel framing - Clip to steel framing
1850 +	1149000	1/4-14 x 1"	3/8" HWH	#3	.036-.210	.520	2,500	
1150000 +	1150000	1/4-14 x 1-1/4"	3/8" HWH	#3	.036-.210	.550	2,000	
1890 +	1152000	1/4-14 x 1-1/2"	3/8" HWH	#3	.036-.210	.800	2,000	
1920	1155000 P	1/4-14 x 2"	3/8" HWH	#3	.036-.210	1.450	1,500	
1950 +	1157000	1/4-14 x 3"	3/8" HWH	#3	.036-.210	2.450	1,000	
1304000	1304000	1/4-14 x 4"	3/8" HWH	#3	.036-.210	3.450	500	

+ (CL+) Coating

TEKS® Fasteners

Finish: Electro-zinc Plating.



PART NUMBER	REFERENCE NUMBER	DESCRIPTION	HEAD STYLE	DRILL POINT	DRILL & TAP CAPACITY	MAX. MATERIAL ATTACHMENTS	BOX QTY	"A" PAK QTY	APPLICATIONS
113401	113401	12-14 x 3/4"	5/16" HWH	#3	.036-.210	.270	5,000		- Duct work to steel framing - Accessories to steel framing - Clip to steel framing
113601	113601	12-14 x 1"	5/16" HWH	#3	.036-.210	.520	4,000		
112301	112301	12-14 x 1-1/2"	5/16" HWH	#3	.036-.210	.800	2,500		
114001	114001	12-14 x 2"	5/16" HWH	#3	.036-.210	1.450	2,000		
114701	114701	1/4-14 x 3/4"	3/8" HWH	#3	.036-.210	.210	3,000		
114901 A	114901 A	1/4-14 x 1"	3/8" HWH	#3	.036-.210	.400		100	
115001	115001	1/4-14 x 1-1/4"	3/8" HWH	#3	.036-.210	.650	2,000		
115201 A	115201 A	1/4-14 x 1-1/2"	3/8" HWH	#3	.036-.210	.900		100	
115701	115701	1/4-14 x 3"	3/8" HWH	#3	.036-.210	2.400	1,000		

A Available in A PAK

TEKS Medium Duty Steel-To-Steel 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
#12	2	156	243	283	375	605	848	1181	1856	3520
	3	142	211	289	341	551	757	1063	1631	2998
1/4	3	141	231	293	346	613	880	1145	1858	4550

Shear Values
(Average Lbs. Ultimate)

FASTENER		STEEL GAUGE (Lapped)							
DIA.	PT	26	24	22	20	18	16	14	12
#12	2	365	600	623	898	1370	1758	2138	2202
	3	-----	-----	-----	769	1358	1620	1970	1986
1/4	3	-----	-----	-----	930	1442	2100	2584	2650

Fastener Values

FASTENER (Dia-TPI)	TENSILE (Lbs. Min)	SHEAR (Avg. Lbs. Ultimate)	TORQUE (Min. in Lbs.)
12-14	2778	2000	92
1/4-14	4060	2600	150

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.