Metal Screws

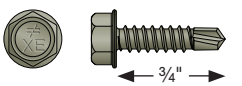
Strong-Drive®
XE EXTERIOR STRUCTURAL METAL Screw

For Simpson Strong-Tie® Connectors

Features:

- 5⁄16" hex head (replacement driver bit — BITHEXR516-134)
- 16 threads per inch
- Dual hardened heat treatment improves drilling efficiency, maximizes ductility and reduces the potential for hydrogen embrittlement
- Quik Guard® coated for corrosion protection
- Meets ASTM C1513 drill-time performance
- Only fastener load rated for Simpson Strong-Tie® L70Z and LS70Z connectors for use with Trex® Elevations™ steel deck framing

For Technical Data and Loads, see Technical Supplement



Quik Guard® Coating

Length (in.)	Screw Size/ Nail Gauge	Shank Dia. (in.)	Head Dia. (in.)	Drive	Head Type	Threads	Point	Point Size	Material/ Coating	Package Size	Model No.
¾	#10	0.19	0.4	5⁄16" hex	Hex-washer head	Machine threads	#2 drill point	2	Quik Guard coating	100	XEQ34B1016C
¾	#10	0.19	0.4	5⁄16" hex	Hex-washer head	Machine threads	#2 drill point	2	Quik Guard coating	1,000	XEQ34B1016M

Strong-Drive®
Self-Drilling X Metal Screw

Common Applications:

Steel stitching ("side-lap" stitching); cold-formed steel framing

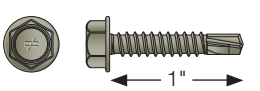
Features:

- 5⁄16" hex head (replacement driver bit — BITHEXR516-134)
- Drill point
- Hex-washer head
- Also available collated for the Quik Drive® system; see p. 211 for details

Codes/Standards: IAPMO UES ER-326, ICC-ES ESR-3006, City of LA RR26009, RR25670, SDI DDM03 Appendix VII and DDM04, State of Florida FL16937

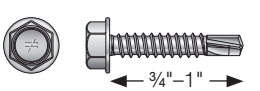
Warning: Industry studies show that hardened fasteners can experience performance problems in wet or corrosive environments. Accordingly, use this product in dry, interior and noncorrosive environments only.

For Technical Data and Loads, see Technical Supplement



Quik Guard Coating

Shank Size	Length (in.)	Threads per Inch	Point Size	Washer Dia. (in.)	Drill-Through Thickness (in.)	Carton Quantity	Model No.
10	1	16	3	0.42	0.11 – 0.18	4,000	XQ1B1016-4K
12	1	14	3	0.42	0.11 – 0.21	3,500	XQ1B1214-3.5K



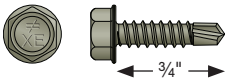
Clear Zinc Coating

Shank Size	Length (in.)	Threads per Inch	Point Size	Drill-Through Thickness (in.)	Carton Quantity	Model No.
10	¾	16	1	0.03 – 0.11	5,000	XU34B1016-5K
10	¾	16	3	0.11 – 0.18	5,000	X34B1016-5K
10	1	16	3	0.11 – 0.18	4,000	X1B1016-4K
12	1	14	3	0.11 – 0.21	3,500	X1B1214-3.5K

Strong-Drive® XE EXTERIOR STRUCTURAL METAL Screw

Structural Metal Connectors

For more information, see p. 92, C-F-2019 Fastening Systems Catalog



Cold-Formed Steel Member Connection Loads, Steel to Steel

Size (in.)	Model No.	Nominal Dia. d (in.)	Washer Dia. d_w (in.)	Load Description	Reference Shear (lb.)						Reference Pull-Over (lb.)						Reference Pull-Out (lb.)					
					Steel Thickness: [mil (ga.)]						Steel Thickness: [mil (ga.)]						Steel Thickness: [mil (ga.)]					
					27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)
#10 x ¾	XEQ34B1016	0.19	0.4	Allowable strength (ASD)	182	235	365	465	465	465	330	425	605	785	785	785	64	95	128	226	306	501
				Design strength (LRFD)	292	375	585	695	695	695	525	675	970	1,175	1,175	1,175	103	152	205	361	490	801
				Nominal strength	423	535	830	1,290	1,290	1,290	805	1,035	1,485	2,065	2,065	2,065	167	234	348	555	750	1,225

1. Screws and their connections have been tested per AISI Standard Test Method S904 and S905.
2. Loads are based on cold-formed steel members with a minimum yield strength, F_y = 33 ksi and tensile strength, F_u = 45 ksi for 43 mil (18 ga.) and thinner, and a minimum yield strength, F_y = 50 ksi and tensile strength, F_u = 65 ksi for 54 mil (16 ga.) and thicker.
3. Screws shall extend through the connection with a minimum of three exposed threads per AISI General Provisions Standard Section D1.3.

Screw Strength

Size (in.)	Nominal Strength		Design Strength (LRFD) ϕ = 0.5 (lb.)		Allowable Strength (ASD) Ω = 3.0 (lb.)	
	P_{ss}	P_{ts}	ϕP_{ss}	ϕP_{ts}	P_{ss}/Ω	P_{ts}/Ω
#10 x ¾	1,390	2,350	695	1,175	465	785

P_{ss} — Shear strength
P_{ts} — Tensile strength

Allowable Loads for Connectors in Trex Elevations

Model No.	Length (in.)	Fasteners	Allowable Loads (lb.) (F1)	
			43 mil (18 ga.)	68 mil (14 ga.)
L70Z	7	(8) #10	935	1,265
LS70Z	6⅜	(10) #10	600	1,070

1. Loads are for one part only.
2. Loads are for 8" headers/joists.
3. F1 load refers to the download or the uplift loads acting along the web of the joist/header.