CFS Connections



Strong-Drive°

XE EXTERIOR STRUCTURAL METAL Screw

Structural Metal Connectors

Common Application:

Only fastener load rated for Simpson Strong-Tie L70Z and LS70Z connectors for use with Trex[®] Elevations™ steel deck framing

For more information, see p. 114, C-F-2023 Fastening Systems catalog

Max. grip

length

Cold-Formed Steel Member Connection Loads, Steel to Steel

Size-	Model	Nominal Dia.	Washer Dia.	Load	Reference Shear (lb.) Steel Thickness: [mil (ga.)]				Reference Pullover (lb.) Steel Thickness: [mil (ga.)]					Reference Pullout (lb.) Steel Thickness: [mil (ga.)]								
																			TPI x Length	No.	d (in.)	d _w (in.)
		(die /	, <i>,</i>		(22)	(20)	(18)	(16)	(14)	(12)	(22)	(20)	(18)	(16)	(14)	(12)	(22)	(20)	(18)	(16)	(14)	(12)
				Allowable strength (ASD)	182	235	365	465	465	465	330	425	605	785	785	785	64	95	128	226	306	501
#10-16 x ³ / ₄	XEQ34B1016	0.19	0.4	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_u = 33 ksi and tensile strength, F_u = 45 ksi for 43 mil (18 ga.) and thinner, and a minimum yield strength, F_u = 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.
- 4. Maximum grip length for the XEQ34B1016 is 0.34". Grip length is the total connection thickness plus three protruding threads.

Screw Strength

Size- TPI x Length		ninal ngth	φ=	ength (LRFD) : 0.5 b.)	Allowable Strength (ASD) $\Omega = 3.0$ (lb.)			
Laigui	P _{ss}	Pts	φ P _{ss}	φ P _{ts}	P _{ss} /Ω	P _{ts} /Ω		
#10-16 x ¾	1,390	2,350	695	1,175	465	785		

Pss - Shear strength

 $\mathsf{P}_{ts}-\mathsf{Tensile}\;\mathsf{strength}$

Allowable Loads for Connectors with Exterior Steel Deck Framing

			Allowable Loads (lb.) (F ₁)				
Model No.	Length (in.)	Fasteners					
			43 mil (18 ga.)	68 mil (14 ga.)			
L70Z	7	(8) #10	935	1,265			
LS70Z	6%	(10) #10	600	1,070			

- 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.
- 4. The Strong-Drive XE Exterior Structural Metal Screw is the only fastener load rated for use with L70Z/LS70Z connectors and New Castle Steel™ steel deck framing.