

Quik Drive auto-feed screw driving systems offer a labor saving method for installing specialty fasteners engineered for a wide range of cold-formed steel commercial and residential construction applications.

The systems offer several easy-to-use attachments that bring speed and reliability to applications that require the fastening power of screws.

Featuring patented collation technology, Quik Drive fasteners are designed to meet or exceed industry standards for strength and longevity while offering easy-to-load strips for efficient performance in auto-feed systems.

Some applications include:

- Subflooring, sheathing, wallplates and stairtreads
- Decks and docks
- Drywall
- Fiber cement siding and backerboard
- Composite or wood underlayment
- Metal roofing and siding
- Tile roofing
- Steel to steel

See www.strongtie.com or Quik Drive® catalog C-QD08 for more detailed information.

Quik Drive Screw Strength

Model No.	Screw Size	Nominal Strength		Load Resistance Factor Design (LRFD)		Allowable Stress Design (ASD)	
		Shear	Tension	Shear	Tension	Shear	Tension
		P_{ss}	P_{ts}	ΦP_{ss}	ΦP_{ts}	P_{ss}/Ω	P_{ts}/Ω
Steel to Steel							
PHSD34S0818	#8 x 3/4"	1495	1810	750	905	500	605
TRSD34S1016	#10 x 3/4"	1885	2120	945	1060	630	705
X1S1016	#10 x 1"	1835	2885	920	1145	610	960
XQ1S1016	#10 x 1"	1835	2885	920	1145	610	960
X1S1214	#12 x 1"	2485	4045	1240	2020	830	1350
XQ1S1214	#12 x 1"	2485	4045	1240	2020	830	1350
Steel Decking							
X78S1224	#12 x 7/8"	2665	4680	-	-	-	-
XQ78S1224	#12 x 7/8"	2800	4260	1400	2130	935	1420
XQ114S1224	#12 x 1 1/4"	2800	4260	1400	2130	935	1420
XQ112S1224	#12 x 1 1/2"	2800	4260	1400	2130	935	1420
Metal-Roofing Clip to Steel							
PCSD1S1016	#10 x 1"	1705	2380	850	1190	570	795
PCSD1S1214	#12 x 1"	1760	3180	880	1590	585	1060
Metal-Roofing Clip to Wood							
PC1BS1012	#10-12 x 1"	1415	2080	710	1040	470	695
PC1BS1211	#12-11 x 1"	1715	3080	860	1540	570	1025
PCULP1BS1012	#10-12 x 1"	1625	2275	815	1140	540	760
Drywall							
DWF114PS	#6 x 1 1/4"	1255	1575	630	790	420	525
DWF158PS	#6 x 1 3/8"	1255	1575	630	790	420	525
DWFSD114PS	#6 x 1 1/4"	1260	1720	630	860	420	575
DWFSD158PS	#6 x 1 3/8"	1260	1720	630	860	420	575
Fiber Cement Board							
CB3BLG112S	#10 x 1 1/2"	1515	2045	755	1020	505	680
CB3BLG134S	#10 x 1 3/4"	1540	2030	770	1015	515	675
Wood to Steel							
PPSD11516S	#8 x 1 1/4"	1565	2160	785	1080	520	720

1. Quik Drive screws have been tested per AISI Standard Test Method TS-04.
2. Factor of Safety (Ω), and Resistance Factor (Φ) are determined per 2001 AISI NAS & 2004 NAS Supplement Chapter F.
3. P_{ss} and P_{ts} are nominal shear strength and nominal tension strength values for the screw itself respectively and are also known as the average (ultimate) values of all tests determined by independent laboratory testing.

Screws for Cold-Formed Steel

X Series

#12 and #10 hex head screws, 5/16" drive



X1S1214

(Blue Zinc)

12 x 1" (25mm)

#3 drill point, 14 tpi

XQ1S1214

(QuikGuard)

12 x 1" (25mm)

#3 drill point, 14 tpi

X1S1016

(Blue Zinc)

10 x 1" (25mm)

#3 drill point, 16 tpi

XQ1S1016

(QuikGuard)

10 x 1" (25mm)

#3 drill point, 16 tpi



X78S1224

(Climaseal®)

12 x 7/8" (21mm)

#4 drill point, 24 tpi

ER-1976

XQ78S1224

(QuikGuard)

12 x 7/8" (21mm)

#4 drill point, 24 tpi

XQ114S1224

(QuikGuard)

12 x 1 1/4" (32 mm)

#5 drill point, 24 tpi

XQ112S1224

(QuikGuard)

12 x 1 1/2" (38 mm)

#5 drill point, 24 tpi

TRSD Series

#10 screw, #3 drill point, truss head, clear zinc coating.



TRSD34S1016

3/4" (19mm)

PHSD Series

#8 screw, #2 drill point, pan head, clear zinc coating.



PHSD34S0818

3/4" (19mm)

Screws for Other Applications

DWF Series

#6 drywall screw, fine thread, sharp point, bugle head, gray phosphate finish.



DWF114PS

1 1/4" (32mm)

DWF158PS

1 5/8" (41mm)

CB3BLG Series

#10 fiber cement board screw, coarse thread, type 17 point, bugle head, C3 mechanical galvanized corrosion protection.



CB3BLG134S

1 3/4" (45mm)

CB3BLG112S

1 1/2" (38mm)

DWF and CB3BLG Series for application attaching to CFS with thickness of 33-18 mil (20-25 ga).

PC Series

#10 and #12 metal roofing-to-wood, #2 square drive – BIT2S, coarse threads, type 17 point, pancake head, clear zinc coating



PC1BS1012

(Clear Zinc)

10 x 1" (25 mm)

Type 17 point, 12 tpi

PC1BS1211

(Clear Zinc)

12 x 1" (25 mm)

Type 17 point, 11 tpi

PCULP Series

#10 metal roofing-to-wood, #2 square drive – BIT2S, coarse threads, type 17 point, ultra-low profile pancake head, clear zinc coating



PCULP1BS1012

(Clear Zinc)

10 x 1" (25 mm)

Type 17 point, 12 tpi

PCSD Series

#10 and #12 metal roofing-to-steel, #2 square drive – BIT2S, coarse threads, drill point, pancake head, available in clear zinc and Quik Guard® coatings.



PCSD1S1016

(Clear Zinc)

10 x 1"

#3 drill point, 16 tpi

PCSD1S1214

(Clear Zinc)

12 x 1"

#3 drill point, 14 tpi

PCSDQ1S1016

(QuikGuard)

10 x 1"

#3 drill point, 16 tpi

PCSDQ1S1214

(QuikGuard)

12 x 1"

#3 drill point, 14 tpi

DWFSD Series

#6 drywall screw, fine thread, #2 drill point, bugle head, yellow zinc coating.



DWFSD158PS

1 5/8" (41mm)

DWFSD114PS

(N2000 Coating)

1 1/4" (32mm)

DWFSD114PS /

DWFZSD114PS

(clear zinc coating)

1 1/4" (32mm)

ER-5623

PPSD Series

#8 wood to steel screw, #2 drill point, flat head, yellow zinc coating.



PPSD11516S

1 5/16" (49mm)

DWFSD and PPSD Series for application attaching to CFS with thickness of 54-43 mil (16-18 ga).

Design values for shearwalls and diaphragms built with the PPSD, DWF or DWFSD series screws used to attach the structural sheathing to the framing; and in accordance with the AISI Lateral Standard are found in shearwall Tables C2.2-1 to C2.1-3 and diaphragm Table D2.1 of that document

QUIK DRIVE® Auto-Feed Screw Driving Systems

Quik Drive Fasteners: Minimum Coating or Material Recommendation

Environment	Untreated	SBX/DOT & Zinc Borate	MCQ	ACQ-C, ACQ-D, CA-B, CBA-A		
				w/o Ammonia	w/ Ammonia	Higher Chemical Content
Interior Dry	Low	Low	Low	Med	Med	High
Exterior	Med	N/A	Med	Med	High	High
Higher Exposure	High	N/A	High	High	High	High

Low – Heavy zinc electroplate, yellow zinc dichromate, gray phosphate, C-3 mechanically galvanized, Climaseal®, TufCote®, clear zinc, 410 stainless steel

Med – N2000®, Quik Guard®

High – 305/316 stainless steel

- Use 305/316 stainless steel with any treatment chemical not listed above or in uncertain environmental exposure conditions.
- For wood with actual retention levels higher than 0.10 pcf (above ground) for CA-B and 0.20 pcf for CBA-A, or 0.25 pcf (above ground) for ACQ-D, ACQ-C and MCQ 305/316 stainless steel fasteners are recommended. Verify actual retention level with wood treater.
- Borate treated woods are not appropriate for outdoor use.
- Test results indicate that N2000 and Quik Guard will perform adequately, subject to regular maintenance and periodic inspection. However, the test protocol followed was a modified version of the nationally recognized test method AWPA E12-94. This test method is an accelerated test, so data over an extended period of time is not available. Also noteworthy is that tests run in a laboratory may not correlate to service conditions. If uncertain, use 305/316 stainless steel.
- Some treated wood may have excess surface chemicals making it potentially more corrosive. If you suspect this or are uncertain, use 305/316 stainless steel.
- Ammonia is typically used as a chemical carrier for difficult to treat wood species, such as, but not exclusive to, Douglas Fir and Hem Fir, which are usually found in the Western United States. Amine carriers are used in some of the Eastern species, such as Southern Yellow Pine. If uncertain, verify chemical chemical with wood treater.

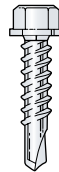
For the latest Simpson Strong-Tie® Quik Drive coating information and additional technical information on this topic, visit our website at www.strongtie.com/info.

SCREWS Self-Drilling Fasteners

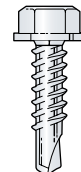
To achieve the loads shown in this catalog, the Designer must verify that the self-tapping screws used have an allowable load capacity equal to or greater than those shown in the table below.

Hex head screw sizes shown are required for connectors in this catalog. Where sheathing or finishes will be applied over the screws and low profile heads are needed, such as with bracing connectors, hurricane ties, and stud-plate ties, the Designer is to ensure that the minimum screw head diameter complies with ASME B18.6.4.

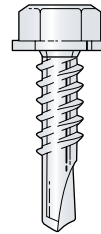
#8 x 3/4"



#10 x 3/4"



#14 x 1"



Shown
Actual Size

Minimum ASD Loads for C-CFS10 Connector Screws

Screw No. Designation	Nominal Diameter d ⁴	Washer Diameter d _w	P _{ss} /Ω	Shear					P _{ts} /Ω	Tension				
				Shear (P _{ns} /Ω, P _{ss} /Ω)						Tension: Pull-Out (P _{not} /Ω, P _{ts} /Ω)				
				Steel Thickness: mil (ga)						Steel Thickness: mil (ga)				
				33-33 (20-20)	43-43 (18-18)	54-54 (16-16)	68-68 (14-14)	97-97 (12-12)		33 (20)	43 (18)	54 (16)	68 (14)	97 (12)
#8	0.164	0.318	335	165	245	335	335	—	655	70	95	145	150	—
#10	0.190	0.375	555	175	265	535	555	555	880	85	110	180	220	355
#14 ⁷	0.242	0.500	810	200	295	605	810	810	1225	80	140	185	200	320

- The tabulated loads may be multiplied by a Factor of Safety (Ω) of 3 to determine the screw nominal strength. The LRFD load may be determined by multiplying the nominal screw load by a Resistance Factor (Φ) of 0.50.
- Self-tapping screw fasteners for steel-to-steel connections used for connectors in this catalog shall be in compliance with ASTM C1513.
- Values are based on cold-formed steel (CFS) members with a minimum yield strength, F_y, of 33 ksi and tensile strength, F_u of 45 ksi for 43 mils (18 ga) and thinner and a minimum yield strength of 50 ksi and tension strength of 65 ksi for 54 mils (16 ga) and thicker.
- Minimum base metal thickness is based on AISI General Provisions Standard Table A5.1-1. Design thickness shall be the minimum base metal thickness divided by 0.95. Design thickness for the steel sheets are: 33 mil=0.0346", 43 mil=0.0451", 54 mil=0.0566", 68 mil = 0.0713", and 97 mil = 0.1017".
- Minimum required screw length is the greater of 3/4" and the minimum length required for the screw to extend through the steel connection a minimum of (3) exposed threads per AISI General Provisions Standard Section D1.3.
- Screw diameters per 2001 AISI NAS Commentary Table C-E4-1.
- 1/4" self-tapping screws may be substituted for #14 screws.