QUIK DRIVE® PROPP150

Auto-Feed System for Steel Decking

SIMPSON Strong-Tie®

Take the hassle out of fastening steel decking. The Simpson Strong-Tie® Quik Drive PROPP150 auto-feed screw driving system is the one tool you need to fasten steel decking to structural steel. Simply choose an appropriate screw size for steel decking, and then select another screw size for steel stitching. Unlike welding and powder-actuated tools (P.A.T.), no special inspection or certifications are necessary, making the PROPP150 fastening system a convenient alternative to other methods of attaching steel decking.

In addition, the PROPP150 auto-feed system provides increased comfort and efficiency. The extension enables stand-up-and-drive fastening to save time and reduce worker fatigue. Also, collated fastener strips virtually eliminate fastener waste as well as the need to handle individual screws, allowing you to work faster and reduce costs.

The Quik Drive® Advantage for Steel Decking:

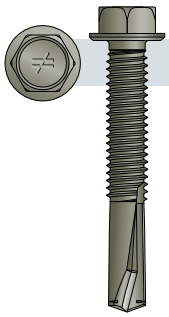
- Attaching steel decking with screws provides a strong connection like welding and P.A.T. provide, but with less hassle
  - Unlike welding, fastening with screws does not require special inspection, either during or after installation
  - No special licensing or certifications are required to operate the Quik Drive auto-feed system, as is required with P.A.T.
- Testing has shown that Quik Drive collated screws achieve some of the highest shear load values in the industry, ensuring a strong, secure connection
- Extension enables stand-up screw driving, saving time and increasing comfort
- Patented Quik Drive auto-feed mechanism provides hands-free screw advancement, eliminating the need to handle individual screws
- Limited Lifetime Warranty on the attachment

The PROPP150 is available as a stand-alone attachment or as a system with a screwdriver motor, auto-feed attachment, extension, screw quiver and a rugged toolbox.

SYSTEM	OPTIONS	MODEL NO.
PROPP150	With Makita Adjustable Torque Motor	PROPP150G2MATK[1]
	With Makita 2500 rpm Screwdriver Motor	PROPP150G2M25K[1]
	Attachment only	QDPROPP150G2
	Replacement Hex Bit	BITHEXLB516
	Replacement Hex Mandrel	BPHXLBPPG2

1. System includes mandrels for driving recessed and 5/16 hex bits.

Work Faster with Quik Drive® Collated Screws



X Series

#10 and #12 Steel to Steel

FEATURES:

- 5/16" Hex drive – BITHEXLB516
- Drill point
- Hex washer head
- Available in clear zinc coating and Quik Guard®
- Straight collation

Model	Shank Size	Length	Threads per Inch	Point Size	Suitable Material Thickness[1]	Finish	Carton Quantity
X1S1016	10	1"	16	3	.110–.175	Clear Zinc	1500
X1S1214	12	1"	14	3	.110–.210	Clear Zinc	1500
XQ1S1016	10	1"	16	3	.110–.175	Quik Guard	1500
XQ1S1214	12	1"	14	3	.110–.210	Quik Guard	1500
XQ78S1224	12	7/8"	24	4	.110–.210	Quik Guard	1500
XQ114S1224	12	1 1/4"	24	5	.250–.500	Quik Guard	1500
XQ112S1224	12	1 1/2"	24	5	.250–.500	Quik Guard	1500

1. Total thickness of all steel including any spalling between the layer.

Technical Information

Screw Shear and Tension Loads

Model No.	Size	Average Ultimate Load (lbs)		Allowable Load (ASD) (lbs)	
		Shear, P_{ss}	Tension, P_{ts}	Shear	Tension
XQ1S1016 X1S1016	#10-16 x 1"	1835	2885	610	960
XQ1S1214 X1S1214	#12-14 x 1"	2485	4045	830	1350
XQ78S1224	#12-24 x 7/8"	2800	4260	935	1420
XQ114S1224	#12-24 x 1 1/4"				
XQ112S1224	#12-24 x 1 1/2"				

1. Screws have been tested per AISI Standard Test Method TS-04. The tabulated ASD loads are based on the screw average ultimate strength with a factor of safety (Ω = 3.0) as determined per 2001 AISI NASPEC Supplement section E4.
2. Use the member connection allowable load tables for connection design.

Steel Thickness

Gauge	Mils	Design Thickness		Minimum Thickness	
		Inches	(mm)	Inches	(mm)
Cold-Formed Steel					
20 (structural)	33	0.0346	0.88	0.0329	0.84
18	43	0.0451	1.14	0.0428	1.09
16	54	0.0566	1.44	0.0538	1.37
14	68	0.0713	1.81	0.0677	1.72
12	97	0.1017	2.58	0.0966	2.45
Hot-Rolled Structural Steel[2]					
1/8"		0.1250	3.18	0.1150	2.92
3/16"		0.1875	4.76	0.1775	4.51
1/4"		0.2500	6.35	0.2400	6.10
1/2"		0.5000	12.7	0.4900	12.45

1. One "mil" is 1/1000 (.001) of an inch. Mil thickness measures the uncoated based material.
2. Minimum thickness is based on ASTM A6-07 permitting under design thickness by 0.01"

Cold-Formed Steel Member Connection Loads

Model No.	Size	Nominal Dia. (in)[7]	Load Description	Shear [1, 3, 13] (lbs) Steel Thickness mil (ga)[6]							Tension: Pull-Over [1, 3, 11] (lbs) Steel Thickness mil (ga)[6]					Tension: Pull-Out [1, 3, 11] (lbs) Steel Thickness mil (ga)[6]							
				33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	1/8"	1/4"	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	3/16"	1/4"	1/2"
Hex Washer Head Screw – Steel to Steel																							
XQ1S1016 X1S1016	#10-16 x 1"	0.190	Allowable Load[2]	290	410	610	610	610	—	—	710	760	960	960	960	145	145	245	290	605	—	—	—
			Average Ultimate Load[4]	655	930	1835	1835	1835	—	—	1745	1860	2885	2885	2885	355	355	605	705	1480	—	—	—
XQ1S1214 X1S1214	#12-14 x 1"	0.216	Allowable Load[2]	290	395	725	830	830	—	—	455	680	1000	1030	1350	135	145	220	245	545	—	—	—
			Average Ultimate Load[4]	660	900	1640	2485	2485	—	—	1110	1665	2450	2520	4045	335	360	540	655	1405	—	—	—
XQ78S1224	#12-24 x 7/8"	0.216	Allowable Load[2]	230	350	605	785	935	935[12]	935[12]	290	400	685	840	1390	80	115	190	275	460	730	1375	1420[12]
XQ114S1224	#12-24 x 1 1/4"																						
XQ112S1224	#12-24 x 1 1/2"		Average Ultimate Load[4]	550	920	1380	1780	2800	2800[12]	2800[12]	875	980	1675	2055	3400	205	280	475	680	1130	1990	3370	4260[12]

1. Screws and screw connections have been tested per AISI Standard Test Method TS-4 and TS-5.
2. The tabulated ASD allowable loads for cold-formed steel (CFS) members are based on the lower of the screw strength or the strength of the screw in the connected members per 2001 AISI NASPEC & 2004 NASPEC Supplement section E4.
3. The safety factor is based on AISI NASPEC Chapter F for tested connections.
4. The average ultimate values listed are achieved under laboratory conditions and should not be used for design loads.
5. Values are based on cold-formed steel (CFS) members with a minimum yield strength of Fy=33 ksi and tensile strength of Fu=45 ksi for 43 mil (18 ga) to 33 mil (20 ga), minimum yield strength of Fy=50 ksi and Fu=65 ksi for 54 mils (16 ga) to 97 mill (12 ga), and a minimum yield strength of Fy=36 ksi and Fu=58 ksi for 1/8" and thicker.
6. For design purposes, steel sheet thicknesses are 0.0346" for 33 mil, 0.0451" for 43 mil, 0.0566" for 54 mil, 0.0713" for 68 mil, and 0.1017" for 97 mil. The actual sheet thickness shall not be less than 95% of these design thickness as specified in AISI/COS/NASPEC 2001 AISI Standard section A2.4.
7. Screw diameters per 2004 AISI General Provisions Commentary Table D1-1.
8. Minimum required screw length is the lesser of 3/4" or the minimum length required for the screw to extend through the steel connection a minimum of 3 exposed threads per 2004 AISI General Provisions Standard section D1.3.
9. Washer diameter, d_w for #10 and #12 screws is 0.375" min.
10. The allowable load (ASD) values showing are not permitted to be increased for short-duration loads such as wind or earthquake loads.
11. The lower of the pull-over and pull-out allowable load should be used for tension design.
12. Not applicable for XQ78S1224.
13. The tabulated shear values are based on the thinner steel member in the connection. Steel thickness for both members must be in the range of the 1/4"-20 gauge.

This flier is effective until January 31, 2012, and reflects information available as of July 1, 2009. This information is updated periodically and should not be relied upon after January 31, 2012; contact Simpson Strong-Tie for current information and limited warranty or see www.strongtie.com.

F-QDXSTLDECK09 7/09 exp. 1/12

800-999-5099
www.strongtie.com