



# QUIK DRIVE<sup>®</sup> PROPP150

## Auto-Feed System for Steel Decking

Take the hassle out of fastening steel decking. The Simpson Strong-Tie<sup>®</sup> 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<sup>®</sup> 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



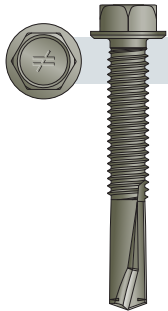
The PROPP150 is available as a stand-alone attachment or as a system with a screwdriver motor, auto-feed attachment, extension, screw quiver and a rugged toolbox.



SYSTEM	OPTIONS	MODEL NO.
PROPP150	With Makita Adjustable Torque Motor	PROPP150G2MATK <sup>1</sup>
	With Makita 2500 rpm Screwdriver Motor	PROPP150G2M25K <sup>1</sup>
	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 <sup>1</sup>	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

### Factored Resistance of Screw

Model No.	Size	Factored Resistance (lbs/kN)	
		Shear, $\Phi P_{ss}$	Tension, $\Phi P_{ts}$
XQ78S1224	#12-24 x 7/8"	1085	1680
		4.83	7.47
XQ114S1224	#12-24 x 1 1/4"	1220	1710
		5.43	7.61
XQ112S1224	#12-24 x 1 1/2"	1165	1725
		5.18	7.67
XQ1S1016	#10-16 x 1"	780	1230
X1S1016	#10-16 x 1"	3.47	5.47
XQ1S1214	#12-14 x 1"	1060	1725
X1S1214	#12-14 x 1"	4.72	7.67

1. Screws and screw connections have been tested per AISI Standard Test Method TS-4 and TS-5 and conforms to CSA S136-07 Section F1.
2. Use the member-connection load table for connection design.

### Steel Thickness

Gauge	Mils	Design Thickness		Minimum Thickness	
		Inches	(mm)	Inches	(mm)
<b>Cold-Formed Steel<sup>1</sup></b>					
20	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
<b>Hot-Rolled Structural Steel<sup>2</sup></b>					
	3/8"	0.1250	3.18	0.1150	2.92
	5/16"	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. Minimum thickness shall not be less than 95% of the design thickness as per CSA S136-07
2. Minimum thickness is based on CSA G40.20-04 permitting under design thickness by 0.01"

### Factored Resistance For Screw Connections

Model No.	Size	Nominal Dia. (in)																										
			Shear, $\Phi P_{ns}$ (lbs / kN)								Tension: Pull-Over, $\Phi P_{nov}$ (lbs / kN)								Tension: Pull-Out, $\Phi P_{not}$ (lbs / kN)									
			Steel Thickness: mil (ga)								Steel Thickness: mil (ga)								Steel Thickness: mil (ga)									
			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"						
<b>Hex Washer Head Screw – Steel to Steel</b>																												
XQ78S1224	#12-24 x 7/8"	0.216	305 1.36	480 2.14	725 3.22	770 3.43	1085 4.83	—	—	350 1.56	555 2.47	810 3.60	815 3.63	1570 6.98	105 0.47	160 0.71	225 1.00	270 1.20	520 2.31	940 4.18	—	—	—	—	—	—	—	—
XQ114S1224	#12-24 x 1 1/4"	0.216	305 1.36	480 2.14	725 3.22	770 3.43	1085 4.83	1085 4.83	1085 4.83	350 1.56	555 2.47	810 3.60	815 3.63	1570 6.98	105 0.47	160 0.71	225 1.00	270 1.20	520 2.31	940 4.18	1680 7.47	1680 7.47	—	—	—	—	—	—
XQ112S1224	#12-24 x 1 1/2"	0.216	305 1.36	480 2.14	725 3.22	770 3.43	1085 4.83	1085 4.83	1085 4.83	350 1.56	555 2.47	810 3.60	815 3.63	1570 6.98	105 0.47	160 0.71	225 1.00	270 1.20	520 2.31	940 4.18	1680 7.47	1680 7.47	—	—	—	—	—	—
X1S1016	#10-16 x 1"	0.190	380 1.69	540 2.40	780 3.47	780 3.47	780 3.47	—	—	930 4.14	990 4.40	1230 5.47	1230 5.47	1230 5.47	190 0.85	190 0.85	325 1.45	375 1.67	790 3.51	—	—	—	—	—	—	—	—	
X1S1214	#12-14 x 1"	0.216	385 1.71	525 2.34	955 4.25	1060 4.72	1060 4.72	—	—	590 2.62	890 3.96	1305 5.80	1345 5.98	1725 7.67	175 0.78	190 0.85	290 1.20	315 1.40	705 3.14	—	—	—	—	—	—	—	—	

1. Screws and screw connections have been tested per AISI Standard Test Method TS-4 and TS-5 and conforms to CSA S136-07 Section F1.
2. The tabulated Factored Resistances are based on the lower of the screw strength or the strength of the screw in the connected members.
3. Values are based on a minimum yield strength of  $F_y=33$  ksi and tensile strength of  $F_u=45$  ksi for 43 mil (18 ga) to 33 mil (20 ga), minimum yield strength of  $F_y=50$  ksi and  $F_u=65$  ksi for 54 mils (16 ga) to 97 mil (12 ga), and a minimum yield strength of  $F_y=36$  ksi and  $F_u=58$  ksi for 1/8" and thicker.
4. 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 AISI General Provisions Standard section D1.3.
5. Washer diameter ( $d_w$ ) for #10 and #12 screws is 0.375".
6. The lower of the pull-over and pull-out factored resistance should be used for tension design.
7. 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 1/4"-20 gauge.



This flier is effective until **January 31, 2012**, and reflects information available as of January 1, 2010. 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](http://www.strongtie.com).