TABLE 1A
Quik Drive® Screws Illustrations and Applications

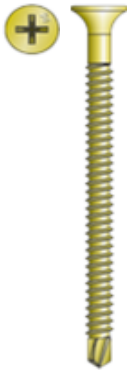
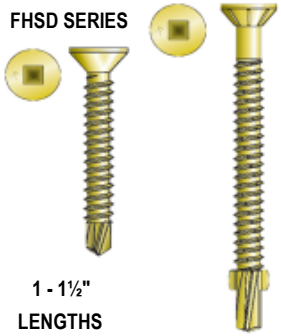
Steel-to-Steel	Drywall-to-Steel	Sheathing-to-Steel	Wood-to-Steel
 X SERIES  PHSD SERIES  FPHSD SERIES	 DWF SERIES  DWFSD SERIES	 CBSDQ SERIES	 PPSD SERIES FHSD SERIES  1 - 1½" LENGTHS 2½" LENGTH

TABLE 1B

Quik Drive® Screws Specifications & Descriptions

Model No.	Screw Size	Shank Diameter (in.)	Minor Diameter (in.)	Major Diameter (in.)	Overall Length (in.)	Thread Length (in.)	Drill Point Length (in.)	Description
X1S1016 / XQ1S1016	#10	-	0.135	0.183	1.000	0.725	0.275	16 TPI, #3 drill point with hex washer head
X1S1214 / XQ1S1214	#12	-	0.162	0.215	1.000	0.650	0.35	14 TPI, #3 drill point with hex washer head
PHSD34S	#8	-	0.116	0.159	0.750	0.571	0.181	18 TPI, #2 drill point with pan head
DWF114PS	#6	0.102	0.081	0.136	1.250	1.010	thrd to point	Fine threads, sharp point with bugle head
DWF158PS	#6	0.102	0.081	0.136	1.625	1.390	thrd to point	Fine threads, sharp point with bugle head
PPSD11516S / PPSDQ11516S	#8	0.130	0.115	0.185	1.937	0.820	0.154	Fine threads, #2 drill point with flat head
PPSD134S1016 / PPSDQ134S1016	#10	-	0.135	0.183	1.750	0.897	0.197	16 TPI, #3 drill point with flat head
PPSD3S1016 / PPSDQ3S1016	#10	-	0.135	0.183	2.900	1.359	0.197	16 TPI, #3 drill point with flat head
CBSDQ158S	#8	-	0.116	0.161	1.625	1.175	0.295	16 TPI, #2 drill point with flat head
CBSDQ214S	#10	-	0.135	0.183	2.250	0.176	0.335	16 TPI, #2 drill point with flat head
DWFSD114PS / DWFSDG114PS	#6	0.104	0.099	0.136	1.250	0.859	0.157	20 TPI, #2 drill point with bugle head
DWFSD158PS	#6	0.104	0.099	0.136	1.625	1.390	0.157	20 TPI, #2 drill point with bugle head
DWFSD178PS	#6	0.104	0.099	0.136	1.875	1.483	0.157	20 TPI, #2 drill point with bugle head
DWFSD238PS	#8	0.129	0.114	0.157	2.400	1.823	0.158	18 TPI, #2 drill point with bugle head
FHSD1S1018	#10	-	0.128	0.183	1.000	0.655	0.200	18 TPI, #2 drill point with flat head
FHSD114S0818	#8	-	0.115	0.161	1.194	0.849	0.200	18 TPI, #2 drill point with flat head
FHSD212S1214	#12	0.175	0.157	0.209	2.500	1.647	0.433	14 TPI, #4 drill point with flat head
SSFHSD112S1016	#10	-	0.135	0.183	1.500	1.003	0.197	16 TPI, #2 drill point with flat head
FPHSD34S1016	#10	-	0.135	0.183	0.750	0.236	0.516	16 TPI, #3 drill point with flat pan head
FPHSD34S1214	#12	-	0.157	0.209	0.750	0.236	0.516	14 TPI, #3 drill point with flat pan head

TABLE 2

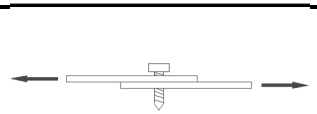
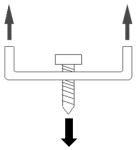
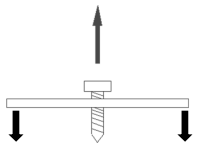
Quik Drive® Screws Shear and Tensile Loads

Model No.	Screw Size	Allowable Stress Design (ASD)		Load Resistance Factor Design (LRFD)	
		Shear	Tensile	Shear	Tensile
X1S1016 / XQ1S1016	#10 x 1"	610	960	920	1445
X1S1214 / XQ1S1214	#12 x 1"	830	1350	1240	2020
PHSD34S	#8 x 3/4"	500	605	750	905
DWF114PS	#6 x 1-1/4"	420	525	630	790
DWF158PS	#6 x 1-5/8"	420	525	630	790
PPSD11516S / PPSDQ11516S	#8 x 1-15/16"	520	720	785	1080
PPSD134S1016 / PPSDQ134S1016	#10 x 1-3/4"	680	740	1020	1110
PPSD3S1016 / PPSDQ3S1016	#10 x 3"	680	740	1020	1110
CBSDQ158S	#8 x 1-5/8"	580	835	870	1250
CBSDQ214S	#10 x 2-1/4"	735	1110	1105	1650
DWFSD114PS / DWFSDG114PS	#6 x 1-1/4"	420	575	630	860
DWFSD158PS	#6 x 1-5/8"	420	575	630	860
DWFSD178PS	#6 x 1-7/8"	420	575	630	860
DWFSD238PS	#8 x 2-3/8"	420	575	630	860
FHSD1S1018	#10 x 1"	405	630	610	940
FHSD114S0818	#8 x 1-1/4"	405	630	610	940
FHSD212S1214	#12 x 2-1/2"	740	1215	1115	1820
SSFHSD112S1016	#10 x 1-1/2"	760	1150	1135	1730
FPHSD34S1016	#10 x 3/4"	570	740	895	1110
FPHSD34S1214	#12 x 3/4"	845	1125	1320	1690

NOTE:

Screws have been tested per AISI Standard Test Method S904-08. Tabulated loads are based on the screw nominal strength with a factor of safety (Ω) or reistance factor (Φ) determined per AISI S100-07 Section F1.

TABLE 3
Quik Drive Screws - Steel-to-Steel Connection Strengths
Allowable Stress Design (ASD)

MODEL NO.	SCREW SIZE	DIA. (in.)																							
			SHEAR (lbs)								TENSION: PULL-OVER (lbs)						TENSION: PULL-OUT (lbs)								
			Steel Thickness: mil (ga)[3]								Steel Thickness: mil (ga)[3]						Steel Thickness: mil (ga)[3]								
			27-27 (22-22)	33-33 (20-20)	43-43 (18-18)	54-54 (16-16)	68-68 (14-14)	97-97 (12-12)	1/8"	1/4"	27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	3/16"	1/4"	1/2"
PHSD34S0818	#8 x 3/4"	0.164	180	235	305	475	475	475	-	-	220	285	390	605	605	605	65	125	135	215	245	435	-	-	-
FPHSD34S1016	#10 x 3/4"	0.190	175	250	390	570	570	570	-	-	280	365	490	715	740	740	70	80	135	230	335	560	-	-	-
FPHSD34S1214	#12 x 3/4"	0.216	215	265	390	590	845	845	-	-	240	345	470	650	790	790	85	105	160	245	335	540	-	-	-
X1S1016 / XQ1S1016	#10 x 1"	0.190	-	290	410	610	610	610	-	-	-	710	760	960	960	960	-	145	145	245	290	605	-	-	-
X1S1214 / XQ1S1214	#12 x 1"	0.216	-	290	395	725	830	830	-	-	-	455	680	1000	1030	1350	-	135	145	220	245	545	-	-	-
PPSD11516S0818	#8 x 1-15/16"	0.164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	65	85	120	185	-	-	-	-	-

NOTES:

1) Screw connections have been tested per AISI Standard Test Method S905-07. The tabulated loads are based on the lower of the screw strength itself or the strength of the screw in the connected members per AISI S100-07.

2) 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) and thinner, and a minimum yield strength of Fy = 50 ksi and tensile strength of Fu = 65 ksi for 54 mil (16 ga) and thicker.

3) Minimum thickness represents 95% of the design thickness and is the minimum acceptable base metal thickness based on AISI S100-07 Section A2.4. Design thicknesses for the steel sheets are: 27 mil = XXXXX", 33 mil = 0.0346", 43 mil = 0.0451", 54 mil = 0.0566", 68 mil = 0.0713" and 97 mil = 0.1017".

4) Screw diameters are based on AISI S100-07 Commentary Table C-E4-1.

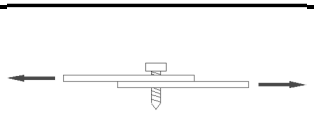
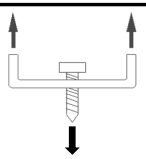
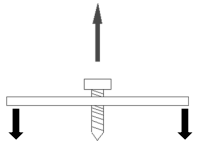
5) Minimum required screw length is the lesser of 3/4" or the minimum length required for the screw to extend through the steel connection a minimum of three (3) exposed threads per AISI General Provisions Standards Section D1.3.

6) Larger of screw head or washer diameter, dw, for #10 and #12 screws is 0.375".

7) For connections with different material thicknesses, use the tabulated loads for the thinner material.

8) Values determined from AISI S100-07 Section E4 calculation are not to exceed the values shown in Table 2.

TABLE 4
Quik Drive Screws - Steel-to-Steel Connection Strengths
Load Resistance Factor Design (LRFD)

MODEL NO.	SCREW SIZE	DIA. (in.)																							
			SHEAR (lbs)								TENSION: PULL-OVER (lbs)						TENSION: PULL-OUT (lbs)								
			Steel Thickness: mil (ga)[3]								Steel Thickness: mil (ga)[3]						Steel Thickness: mil (ga)[3]								
			27-27 (22-22)	33-33 (20-20)	43-43 (18-18)	54-54 (16-16)	68-68 (14-14)	97-97 (12-12)	1/8"	1/4"	27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)	3/16"	1/4"	1/2"
PHSD34S0818	#8 x 3/4"	0.164	290	375	490	760	760	760	-	-	350	450	620	905	905	905	105	200	215	340	395	700	-	-	-
FPHSD34S1016	#10 x 3/4"	0.190	280	400	620	895	895	895	-	-	445	585	780	1110	1110	1110	115	130	215	365	535	900	-	-	-
FPHSD34S1214	#12 x 3/4"	0.216	340	425	625	945	1320	1320	-	-	380	550	755	1035	1265	1265	135	165	260	390	535	865	-	-	-
X1S1016 / XQ1S1016	#10 x 1"	0.190	-	460	655	920	920	920	-	-	-	1135	1215	1445	1445	1445	-	230	230	395	460	965	-	-	-
X1S1214 / XQ1S1214	#12 x 1"	0.216	-	465	635	1155	1240	1240	-	-	-	725	1085	1595	1645	2020	-	210	235	355	395	870	-	-	-
PPSD11516S0818	#8 x 1-15/16"	0.164	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	140	195	295	-	-	-	-	-

NOTES:

1) Screw connections have been tested per AISI Standard Test Method S905-07. The tabulated loads are based on the lower of the screw strength itself or the strength of the screw in the connected members per AISI S100-07.

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