

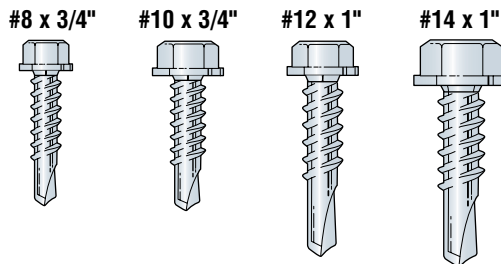
QUIK DRIVE® Auto-Feed Screw Driving Systems

QUIK DRIVE SCREW ALLOWABLE LOADS (100)																	
Model No.	Size	Dia.	SHEAR					TENSION: PULL-OVER					TENSION: PULL-OUT				
			Steel Thickness: mil (ga) ³					Steel Thickness: mil (ga) ³					Steel Thickness: mil (ga) ³				
			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)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)
PAN HEAD SCREW																	
PHSD34S	#8 x 3/4"	0.164	235	307	474	477	422	—	—	—	—	—	125	133	214	247	—
HEX HEAD SCREW																	
X1S1014	#10 x 1"	0.190	290	410	612	612	612	712	760	962	962	962	145	145	247	288	604
X1S1214	#12 x 1"	0.216	291	397	723	828	828	453	680	999	1029	1348	136	146	221	246	544
X78S1224	#12 x 7/8"	0.216	279	394	721	975	975	—	—	—	—	—	70	121	187	217	—
TRUSS HEAD SCREW																	
TRSD34S1012	#10 x 3/4"	0.190	305	438	579	579	579	—	—	—	—	—	70	121	187	217	—
TRSD34S1016	#10 x 3/4"	0.190	293	398	545	629	629	—	—	—	—	—	70	121	187	217	—

1. Values based on lesser of Quik Drive® screw strength (see table on page 14) or strength of the screw in the connected members.
2. Screws and screw connections have been tested per AISI Standard Test Method TS-05. The tabulated allowable loads are based on the lower of the screw strength itself or the strength of the screw in the connected members per 2001 AISI NAS & 2004 NAS Supplement section E4.
3. Values are based on cold-formed steel (CFS) members with a minimum yield strength of $F_y = 33$ ksi and tensile strength of $F_u = 45$ ksi for 43 mil (18 ga) and thinner and a minimum yield strength of $F_y = 50$ ksi and $F_u = 65$ ksi for 54 mils (16 ga) and thicker.
4. Minimum thickness represents 95% of the design thickness and is the minimum acceptable base metal thickness based on 2001 AISI NAS section A2.4. 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".
5. Screw diameters per 2001 AISI NAS Commentary Table G-E4-1.
6. 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.
7. Larger of screw head or washer diameter, dw, for #10 and #12 screws is 0.375".
8. The tabulated values may be increased by 1/3 for seismic or wind loading as applicable per page 12 "Steel Stress Increase" section.

Screws

The values for the connectors in this catalog are based upon using Quik Drive screws as shown above or the calculated minimum screw allowable load value shown in the table below.



Actual Size Shown

SCREW ALLOWABLE LOADS CALCULATED FROM AISI NASPEC (100)																
SIZE	DIAMETER ⁶	SHEAR					TENSION: PULL-OVER					TENSION: PULL-OUT				
		Steel Thickness: mil (ga) ⁴					Steel Thickness: mil (ga) ⁴					Steel Thickness: mil (ga) ⁴				
		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)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)
#8	0.164	164	244	496	684	976	247	322	584	736	1049	72	94	171	215	307
#10	0.190	177	263	534	755	1130	247	322	584	736	1049	84	109	198	249	356
#12	0.216	188	280	569	805	1285	247	322	584	736	1049	95	124	225	284	405
#14 ⁸	0.242	199	297	603	852	1440	389	507	920	1159	1653	107	139	252	318	453
1/4" ⁸	0.250	203	302	613	866	1476	389	507	920	1159	1653	110	144	261	328	468

1. Values based on the calculated strength of the screw in the connected members per 2001 AISI NAS section E4.3.
2. The Designer must verify that the screws used for the connectors shown in this catalog have equal or greater allowable load values, as determined from 2001 AISI NAS with the 2004 Supplement section E4, than those in the table directly above if using other than Quik Drive screws shown in the table at the top of this page.
3. Values are based on cold-formed steel (CFS) members with a minimum yield strength of $F_y = 33$ ksi and tensile strength of $F_u = 45$ ksi for 43 mil (18 ga) and thinner and a minimum yield strength of $F_y = 50$ ksi and $F_u = 65$ ksi for 54 mils (16 ga) and thicker.
4. Minimum thickness represents 95% of the design thickness and is the minimum acceptable base metal thickness based on 2001 AISI NAS section A2.4. 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".
5. Screw diameters per 2001 AISI NAS Commentary Table G-E4-1.
6. 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.
7. Larger of screw head or washer diameter, dw, for #10 and #12 screws is 0.375".
8. Larger of screw head or washer diameter, dw, for #14 and 1/4" hex head screw is 0.50".
9. The tabulated values may be increased by 1/3 for seismic or wind loading as applicable per page 12 "Steel Stress Increase" section.