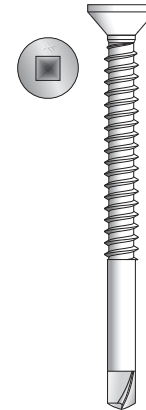


PPSD SCREW

COMMON APPLICATION: Subfloor/sheathing to cold-formed steel
 (#8 - maximum steel thickness: 54 mils/ 16 ga, #10 - maximum steel thickness: 97 mils/12 ga)
 (#8 - maximum sheathing thickness: $\frac{23}{32}$ ", #10 - 1 $\frac{3}{4}$ " - maximum sheathing thickness $\frac{23}{32}$ ",
 #10 - 3" - maximum sheathing thickness: 1 $\frac{1}{8}$ ")



FEATURES

- Flat head
- #3 square drive - standard or undersized
(Driver bit in each box, replacement bit BIT3S and BIT3SU)
- Fine threads
- Pilot point
- Curved collation
- Head diameters meet AISI lateral design standard requirement

AVAILABLE COATINGS

- Yellow-zinc, QuikGuard®

CODES/ STANDARDS

- ASTM C1513 compliant

Product Info

Length (in.)	Shank Size	Head Diameter (in.)	Point Size	Threads per Inch	Carton Quantity	Model No.	PRO 200	PRO 200S	PRO 250	PRO 300S
Yellow Zinc Coating										
1 $\frac{1}{16}$	#8	0.323	2	18	2000	PPSD11516S0818	X	X	X	X
1 $\frac{3}{4}$	#10	0.333	3	16	2000	PPSD134S1016	X	X	X	X
3	#10	0.333	3	16	1000	PPSD3S1016	-	-	-	X
QuikGuard Coating										
1 $\frac{1}{16}$	#8	0.323	2	18	2000	PPSDQ11516S0818	X	X	X	X
1 $\frac{3}{4}$	#10	0.333	3	16	2000	PPSDQ134S1016	X	X	X	X
3	#10	0.333	3	16	1000	PPSDQ3S1016	-	-	-	X

Withdrawal Loads in Steel Connections (lbs)

Model No.	Size	Load Description	Steel Thickness: mil (ga)					
			27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)
PPSD11516S0618 PPSDQ11516S0618	#8	ASD Load	56	69	89	162	-	-
		LRFD	84	104	134	243	-	-
		Nominal Strength	169	206	270	485	-	-
PPSD134S1016 PPSDQ134S1016	#10	ASD Load	64	78	102	184	232	330
		LRFD	96	117	152	275	348	495
		Nominal Strength	191	234	305	555	695	990
PPSD3S1016 PPSDQ3S1016	#10	ASD Load	64	78	102	184	232	330
		LRFD	96	117	152	275	348	495
		Nominal Strength	191	234	305	555	695	990

1. The tabulated values are based on calculations with Section E4 of the AISI S100-07
2. Values are based on cold-formed steel (CFS) members with a minimum yield strength, F_y of 33 ksi and minimum tensile strength, F_u of 45 ksi for 43 mil (18 ga) to 27 mil (22 ga), and a minimum yield strength, F_y of 50 ksi and minimum tensile strength, F_u of 65 ksi for 54 mils (16 ga) to 97 mils (12 ga).
3. For design purposes, steel sheet thicknesses are 0.0283" for 27 mil (22 ga), 0.0346" for 33 mil (20 ga), 0.0451" for 43 mil (18 ga), 0.0566" for 54 mil (16 ga), 0.0713" for 68 mil (14 ga) and 0.1017" for 97 mil (12 ga). The actual sheet thickness shall not be less than 95% of these design thickness as specified in AISI S100, Section A2.4.
4. A minimum of three exposed screw threads are required to achieve the loads in the Table.

Pull-Through Loads for Rated Sheathing Panels (lbs)

Model No.	Screw Size	Load Description	Pull-Through (lbs)					
			Minimum Nominal Panel Thickness(in.)					
			Plywood			OSB		
			1 $\frac{5}{32}$	1 $\frac{9}{32}$	2 $\frac{3}{32}$	1 $\frac{5}{32}$	1 $\frac{9}{32}$	2 $\frac{3}{32}$
PPSD11516S0618 PPSDQ11516S0618	#8	ASD Load	83	84	116	49	109	117
		LRFD	179	181	250	106	235	255
		Nominal Strength	415	420	580	245	545	585
PPSD134S1016 PPSDQ134S1016	#10	ASD Load	75	85	118	52	111	114
		LRFD	162	184	255	112	240	245
		Nominal Strength	375	425	590	260	555	570
PPSD3S1016 PPSDQ3S1016	#10	ASD Load	75	85	118	52	111	114
		LRFD	162	184	255	112	240	245
		Nominal Strength	375	425	590	260	555	570

1. Nominal strength pullthrough loads based on the average ultimate value determined using ICC ES AC233.
2. ASD pullthrough loads based on a factor of safety of 5 applied to the nominal strength value ($C_d=1.0$, increases to C_d 1.6 allowed where applicable)
3. LRFD load based on adjustment of ASD load (K_1/ϕ) * ϕ ($K_1=2.16$, $\phi=0.65$) with λ of 1.0. See 2005 NDS Appendix N for details.

PPSD SCREW

Nominal Shear Strength (Rn) for Shear Walls (Wind) (lbs/ft)

Assembly Description	Screw Size	Max. Aspect Ratio (h/w)	Fastener Spacing at Panel Edges ² (inches)				Designation Thickness of Stud, Track and Blocking (mils)
			6	4	3	2	
1/2" Struct. 1 Sheathing (4-ply), one side	#8	2:1	1065	-	-	-	33 or 43
	#8						43 or 54
	#10						68
3/16" rated sheathing (OSB), one side	#8		910	1025 ³	1425 ³	1825 ³	33
	#8						43 or 54
	#8						54
	#10	68					

For SI: 1 inch = 25.4 mm, 1 ft = 0.305 m, 1 lb = 4.45N.

- Nominal strength shall be multiplied by the resistance factor ($\phi=0.65$) to determine LRFD or divided by the safety factor ($\Omega=2.0$) to determine ASD.
- Screws in the field of the panel shall be installed 12 inches (305 mm) o.c.
- Shear wall height to width aspect ratio (h/w) greater than 2:1, but not exceeding 4:1, shall be permitted provided the nominal strength values are multiplied by 2w/h.
- Maximum stud spacing 24" o.c.
- All sheathing edges shall be attached to framing or 1 1/2" width blocking.
- Table based on Table C2.1-1 AISI Standard "North American Standard for Cold-Form Steel Framing-Lateral Design 2007 Edition with Supplement No. 1 and Commentary".

Nominal Shear Strength (Rn) for Shear Walls (Seismic) (lbs/ft)

Assembly Description	Screw Size	Max. Aspect Ratio (h/w)	Fastener Spacing at Panel Edges ² (inches)				Designation Thickness of Stud, Track and Blocking (mils)
			6	4	3	2	
1/2" Struct. 1 Sheathing (4-ply), one side	#8	2:1	780	990	-	-	33 or 43
	#8		890	1330	1775	2190	43 or 54
	#10		890	1330	1775	2190	68
3/16" OSB, one side	#8		700	915	-	-	33
	#8		825	1235	1545	2060	43 or 54
	#8		940	1410	1760	2350	54
	#10	1230	1850	2310	3080	68	

For SI: 1 inch = 25.4 mm, 1 ft = 0.305 m, 1 lb = 4.45N.

- Nominal strength shall be multiplied by the resistance factor ($\phi=0.6$) to determine LRFD or divided by the safety factor ($\Omega=2.5$) to determine ASD.
- Screws in the field of the panel shall be installed 12 inches (305 mm) o.c. unless otherwise shown.
- Shear wall height to width aspect ratio (h/w) greater than 2:1, but not exceeding 4:1, shall be permitted provided the nominal strength values are multiplied by 2w/h.
- Wall studs and track shall be of ASTM A1003 Structural Grade 33 (Grade 230) Type H steel for members with a designation thickness of 33 and 43 mils, and A1003 Structural Grade 50 (Grade 340) Type H steel for members with a designation thickness equal to or greater than 54 mils.
- All sheathing edges shall be attached to framing or 1 1/2" width 33 mil blocking.
- Maximum stud spacing 24" o.c.
- Table based on Table C2.1-3 AISI Standard "North American Standard for Cold-Form Steel Framing-Lateral Design 2007 Edition with Supplement No. 1 and Commentary".

Nominal Shear Strength (Rn) for Diaphragms with Wood Sheathing³ (lbs/ft)

Membrane Material	Screw Size	Thickness (in.)	Blocked				Unblocked	
			Screw spacing at diaphragm boundary edges and at all continuous panel edges (in.)				Screws spaced maximum of 6" on all supported edges	
			6	4	2.5	2	Load perpendicular to unblocked edges and continuous panel joints	All other configurations
Structural 1	#8 or #10	3/8	768	1022	1660	2045		
		7/16	768	1127	1800	2255	755	565
		1/2	925	1232	1970	2465	825	615
C-D, C-C and other graded wood structural panels ²		3/8	690	920	1470	1840	615	460
		7/16	760	1015	1620	2030	680	505
		1/2	832	1110	1770	2215	740	555

For SI: 1 inch = 25.4 mm, 1 ft = 0.305 m, 1 lb = 4.45N.

- Framing members and blocking shall have a designated thickness of 33 mils minimum.
- Wood structural panels shall conform to DOC PS-1 and PS-2.
- For wood structural panel sheathed diaphragms, tabulated Rn values shall be applicable for short-term load duration (wind or seismic loads). For other in-plane lateral loads of normal or permanent load duration as defined by the AF&PA NDS, the values in the table above for wood structural panel sheathed diaphragms shall be multiplied by 0.75 (normal) or 0.67 (permanent).
- Length to width ratio of blocked wood diaphragms shall not exceed 4:1 and 3:1 for unblocked diaphragms.
- Screws installed in the field of the panel shall be spaced at a maximum of 12" o.c.
- Shear values are permitted for use in seismic design where the seismic response modification factor, R, is equal to or less than 3.
- Where diaphragms are blocked, all panel edges must be attached to framing or blocking. Blocking shall be a minimum thickness of 33 mils with a minimum width of 1 1/2".
- Maximum joist spacing 24" o.c.
- Table based on Table D2.1 AISI Standard "North American Standard for Cold-Form Steel Framing-Lateral Design 2007 Edition with Supplement No. 1 and Commentary".
- For open-front structures, see AISI standard for additional information.

For additional corrosion or coating information, please visit <http://www.strongtie.com/fastenercorrosion>

This technical bulletin is effective until June 30, 2014, and reflects information available as of January 1, 2012. This information is updated periodically and should not be relied upon after June 30, 2014; contact Simpson Strong-Tie for current information and limited warranty or see www.strongtie.com.

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