

Collated Metal Screws



FHSD Wood-to-CFS Screw

Common Applications:

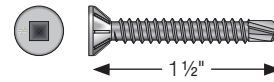
Wood or wood structural panel sheathing to cold-formed steel to cold-formed steel (Recommended max. steel thicknesses: 3/16")

Features:

- Flat head
- Curved collation
- Type 410 stainless-steel screw has nibs under the head for easy countersinking
- 2 1/2" length has wings on the shaft to prevent jacking of the wood panel during installation
- Type 410 stainless steel is coated for additional corrosion protection
- #3 square drive for #10 (replacement bit BIT3S; see p. 182 for more information)
- #2 square drive for #8 (replacement bit BIT2S; see p. 182 for more information)

Codes/Standards: ASTM C1513 compliant; meets minimum head diameter requirements per AISI S213-07, lateral design standard.

For Technical Data and Loads, see Technical Supplement

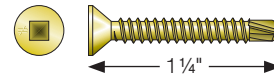


Type 410 Stainless Steel*

Length (in.)	Shank Size	Threads Per Inch	Point Size	Carton Quantity	Min. Head Dia. (in.)	Model No.	PRO PP150G2
1 1/2	#10	16	3	1,000	0.382	SSFHSD112S1016	✓

* These products are subject to quantities on hand or may require special ordering and are subject to minimum order quantities and longer lead times. Call Simpson Strong-Tie for details (800) 999-5099.

Yellow Zinc Coating



Length (in.)	Shank Size	Threads Per Inch	Point Size	Carton Quantity	Min. Head Dia. (in.)	Model No.	PRO 200SG2	PRO 200G2
1 1/4	#8	18	2	2,500	0.310	FHSD114S0818	✓	✓

WSFLRV Wood-to-CFS/Aluminum Screw

Common Applications:

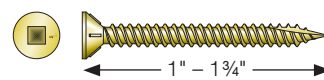
Wood or wood structural panel sheathing to cold-formed steel (Recommended max steel thicknesses: 20 gauge), Wood to aluminum (Recommended max. aluminum thicknesses: 3/16")

Features:

- Flat head with nibs for easy countersinking
- #3 square drive (driver bit in each box; replacement bit model BIT3S)
- Fine threads
- Type-17 point
- Yellow zinc coating
- Curved collation

Codes/Standards: ASTM C1513 compliant; meets AISI S213 minimum for sheathing attachment if $t \leq 54$ mil.

For Technical Data and Loads, see Technical Supplement



Yellow Zinc Coating

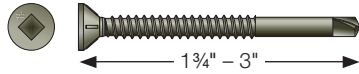
Length (in.)	Shank Size	Carton Quantity	Min. Head Dia. (in.)	Model No.	PRO 200SG2	PRO 200G2	PRO 250G2
1	#8	2,500	0.327	WSF1LRVS	✓	✓	
1 1/4	#8	2,000	0.327	WSF134LRVS	✓	✓	✓

CFS Systems

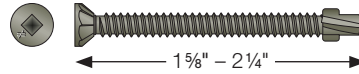
PPSD/CBSDQ/FHSD/WSFLRV Screws

For More Product Information:

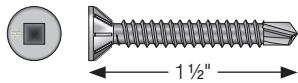
- Strong-Drive® PPSD Sheathing-to-CFS screw: see pp. 94 and 209, C-F-2019
- CBSDQ Sheathing screw: see p. 213, C-F-2019
- FHSD Wood-to-CFS screw: see p. 215, C-F-2019
- WSFLRV Wood-to-CFS/Aluminum screw: see p. 215, C-F-2019
- See ESR-4208 for Strong-Drive PPSD Sheathing-to-CFS and CBSDQ Sheathing screws design and installation with wood structural panels.



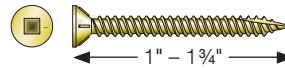
Strong-Drive® PPSD SHEATHING-TO-CFS Screw



CBSDQ Sheathing-to-CFS Screw



FHSD Wood-to-CFS Screw



WSFLRV Wood-to-CFS/Aluminum Screw

PPSD, CBSDQ, FHSD, WSFLRV Screw¹¹ — Nominal Shear Strength (R_n) for Wind and Other In-Plane Loads for Shearwall (lb./ft.)

Assemble Description	Maximum Aspect Ratio (h/w)	Fastener Spacing at Panel Edges (in.)			
		6	4	3	2
1 ⁵ / ₃₂ " structural 1 sheathing (4 ply), one side	2:1	1,065 ³	—	—	—
7/ ₁₆ " rated sheathing (OSB), one side	2:1	910 ³	1,410	1,735	1,910
7/ ₁₆ " rated sheathing (OSB), one side oriented perpendicular to framing	2:1	1,020	—	—	—
7/ ₁₆ " rated sheathing (OSB), one side	2:1 ⁵	—	1,025	1,425	1,825

- Nominal strength shall be multiplied by the resistance factor ($\phi = 0.65$) to determine the design strength or divided by the safety factor ($\Omega = 2.0$) to determine the allowable strength.
- Screws in the field of the panel shall be installed 12" (305 mm) on center (o.c.).
- Where fully blocked gypsum board is applied to the opposite side of this assembly, per Table C2.1-2 AISI S213 Standard *North American Standard for Cold-Formed Steel Framing — Lateral Design 2018 Edition with Supplement No. 1 and Commentary* with screw spacing at 7" (178 mm) o.c. edge and 7" (178 mm) o.c. field, these nominal strengths are permitted to be increased by 30%.
- For walls with material of the same type and nominal strength applied to opposite faces of the same wall, the available strength of material of same capacity is cumulative. Where the material nominal strengths are not equal, the available strength shall be either two times the available strength of the material with the smaller value or shall be taken as the value of the stronger side, whichever is greater. Summing the available strengths of dissimilar material applied to opposite faces or to the same wall line is not allowed.
- Shearwall height to width aspect ratio (h/w) greater than 2:1, but not exceeding 4:1, shall be permitted provided the nominal shear strength is multiplied by 2w/h.
- For wood structural panel sheathed shearwalls, tabulated R_n values shall be applicable for short-term load duration (wind loads). For other in-plane lateral loads of normal or permanent load duration as defined by the AWC NDS, the values in the table above for wood structural panel sheathed shearwalls shall be multiplied by 0.63 (normal) or 0.56 (permanent).
- Maximum stud spacing 24" o.c.
- All sheathing edges shall be attached to framing or 1¹/₂" width 33 mil blocking.
- Table based on Table C2.1-1 AISI S213 Standard *North American Standard for Cold-Formed Steel Framing — Lateral Design 2018 Edition with Supplement No. 1 and Commentary*.
- See General Load Table on p. 16 for screw strength.
- #8 screws — PPSD, CBSDQ, FHSD, WSFLRV. #10 screws — FHSD.
- Stud, track and blocking (if applicable) shall be a minimum of 33 mil.

CFS Systems

PPSD/CBSDQ/FHSD/WSFLRV Screws (cont.)

PPSD, CBSDQ, FHSD, WSFLRV Screw¹² — Nominal Shear Strength (Rn) for Seismic and Other In-Plane Loads for Shearwall (lb./ft.)

Assemble Description	Maximum Aspect Ratio (h/w)	Fastener Spacing at Panel Edges ² (in.)				Designation Thickness ^{5,6} of Stud, Track and Blocking (mil)	Required Sheathing Screw Size
		6	4	3	2		
1½" structural 1 sheathing (4 ply), one side	2:1 ³	780	990	—	—	33 or 43	8
	2:1	890	1,330	1,775	2,190	43	10
¾" rated sheathing (OSB), one side	2:1 ³	700	915	—	—	68	8
	2:1 ³	825	1,235	1,545	2,060	48	8
	2:1	940	1,410	1,760	2,350	54	8
	2:1	1,232	1,848	2,310	3,080	68	10

- Nominal strength shall be multiplied by the resistance factor ($\phi = 0.60$) to determine the design strength or divided by the safety factor ($\Omega = 2.5$) to determine the allowable strength.
- Screws in the field of the panel shall be installed 12" (305 mm) on center (o.c.).
- Shearwall height to width aspect ratio (h/w) greater than 2:1, but not exceeding 4:1, shall be permitted provided the nominal shear strength is multiplied by 2w/h.
- For walls with material of the same type and nominal strength applied to opposite faces of the same wall, the available strength of material of same capacity is cumulative. Where the material nominal strengths are not equal, the available strength shall be either two times the available strength of the material with the smaller value or shall be taken as the value of the stronger side, whichever is greater. Summing the available strengths of dissimilar material applied to opposite faces or to the same wall line is not allowed.
- Substitution of a stud or track of a different designation thickness is not permitted.
- 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 mil, and A1003 Structural Grade 50 (Grade 340) Type H steel for members with a designation thickness equal to greater than 54 mil.
- For wood structural panel sheathed shearwalls, tabulated Rn values shall be applicable for short-term load duration (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 shearwalls shall be multiplied by 0.63 (normal) or 0.56 (permanent).
- Maximum stud spacing 24" o.c.
- All sheathing edges shall be attached to framing or 1½" width 33 mil blocking.
- Table based on Table C2.1-3 AISI S213 Standard *North American Standard for Cold-Formed Steel Framing — Lateral Design 2018 Edition with Supplement No. 1 and Commentary*.
- See General Load Table on p. 16 for screw strength.
- #8 screws — PPSD, CBSDQ, FHSD, WSFLRV. #10 screws — FHSD.