

# Strong-Drive® PPHD SHEATHING-TO-CFS Screw



## For Sheathing, Drywall and Subfloor-to-CFS applications

### Self-Drilling Pilot Point Screw — replaces Strong-Drive PPSD Sheathing-to-CFS Screw

The Strong-Drive PPHD Sheathing-to-CFS screw is designed to drive through sheathing materials and into cold-formed steel (CFS) using its long #5 drill point. The Strong-Drive PPHD Sheathing-to-CFS screw comes collated for use in Quik Drive® auto-feed screw driving steel systems and in bulk for hand-drive applications.

**Installation Guidelines:** #8 — maximum steel thickness two layers of 16 ga. (0.125" total); #10 and #12 — maximum steel thickness two layers of 12 ga. (0.218" total)

**Recommended wood panel sheathing thickness:** #8 x 1 1/16"–7/8"; #10 x 1 3/4"–1 9/32"; #10 x 3"–1 1/8"; #12 x 1 3/4"–1 9/32"

### Features

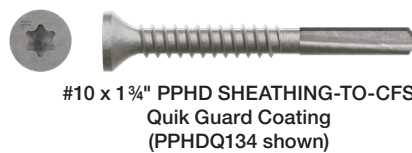
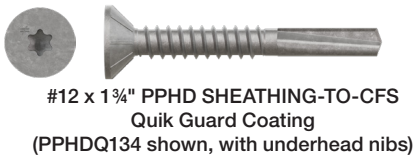
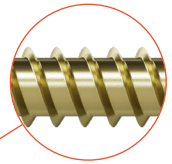
- Currently available in sizes #8 x 1 1/16"; #10 x 1 3/4", 3"; #12 x 1 3/4"
- #5 pilot point for maximum drilling performance
- #8 sizes have buttress threads and new dog-eared point to improve drilling through sheathing and metal
- 6-lobe recess for a secure drive
- Underhead nibs for easy countersinking on #12 size
- Available collated for auto-feed driving and in bulk quantities for hand-drive applications
- Yellow zinc and Quik Guard® coatings
- Collated PPHD Sheathing-to-CFS screws are compatible with Quik Drive PRO300SG2, PRO250G2 and PRO200SG2 auto-feed screw driving systems



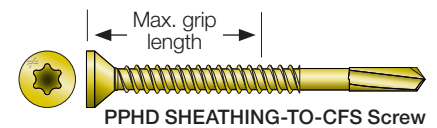
Quik Guard coated PPHD SHEATHING-TO-CFS screw installation using Quik Drive system

- #12 PPHD sizes are compatible with Quik Drive PROHSD60 and PROHSD75 auto-feed screw driving systems.
- PPHD screws may be used as prescribed by the IBC codes for shearwalls and diaphragms as described in AISI S240 and AISI S400

**Codes/Standards:** ASTM C1513 compliant, ICC-ES ESR 4208 (includes City of LA supplemental)



Strong-Drive PPHD Sheathing-to-CFS screws are available in a variety of sizes to suit your application needs.



### Product Table

Model No.	Size	Length (in.)	TPI	Point Size	Coating	Max. Grip (in.)	Carton Qty.	Pallet Qty.	Weight (lb.)	UPC
PPHD11516B-4K	#8	1 15/16	17	5	Yellow Zinc	1.034	4,000	36	34	707392017868
PPHD11516S0817*	#8	1 15/16	17	5	Yellow Zinc	1.034	2,000	100	17.5	707392021018
PPHDQ11516B-4K	#8	1 15/16	17	5	Quik Guard	1.034	4,000	36	36	707392017936
PPHDQ11516S0817*	#8	1 15/16	17	5	Quik Guard	1.034	2,000	100	18	707392021025
PPHD134B1016-4K	#10	1 3/4	16	5	Yellow Zinc	0.793	4,000	36	38	707392017912
PPHD134S1016*	#10	1 3/4	16	5	Yellow Zinc	0.793	2,000	100	19.5	707392017929
PPHDQ134B1016-4K	#10	1 3/4	16	5	Quik Guard	0.793	4,000	36	40	707392017950
PPHDQ134S1016*	#10	1 3/4	16	5	Quik Guard	0.793	2,000	100	20	707392017974
PPHD3S1016*	#10	3	16	5	Yellow Zinc	1.273	1,000	100	16.5	707392017998
PPHDQ134B1214-4K	#12	1 3/4	14	5	Quik Guard	0.766	4,000	36	56	707392017967
PPHDQ134S1214*	#12	1 3/4	14	5	Quik Guard	0.766	1,000	100	15.5	707392017981

Replacement hand driver bit: BIT25T-2-R2; replacement Quik Drive driver bit: BITTX25-R3

TPI: Threads per inch

\*Collated for Quik Drive auto-feed screw driving systems.

## Fast and Efficient

The Strong-Drive PPHD Sheathing-to-CFS screw's unique #5 pilot point starts fast, drills quickly and eliminates the need for predrilling, while the 6-lobe drive recess ensures positive engagement for the drive from start to finish.

## Tested Performance

PPHD screws have been tested for withdrawal and head pull-through loads.

### PPHD — Pullout Loads — Steel Connections

Model No.	Size	Load Description	Pullout (lb.)					
			Steel Thickness: mil (ga.)					
			27 (22)	33 (20)	43 (18)	54 (16)	68 (14)	97 (12)
PPHD11516 PPHDQ11516	#8	Allowable Strength (ASD)	60	85	135	195	—	—
		Design Strength (LRFD)	100	140	220	315	—	—
		Nominal Strength	155	225	335	485	—	—
PPHD134 PPHDQ134 PPHD3	#10	Allowable Strength (ASD)	60	85	140	205	310	440
		Design Strength (LRFD)	100	140	220	330	500	700
		Nominal Strength	155	225	340	505	765	1,075
PPHDQ134	#12	Allowable Strength (ASD)	65	85	140	210	335	475
		Design Strength (LRFD)	105	140	225	335	540	760
		Nominal Strength	170	235	350	515	825	1,170

1. Screws and connections have been tested per AISI Standard Methods S904-13 and S905-13.
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 mil (16 ga.) to 97 mil (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 thicknesses as specified in AISI S100-12.
4. A minimum of three exposed screw threads are required to achieve the loads in the table.
5. PPHDQxxx models have Quik Guard® coating; PPHDxxx models have yellow zinc coating.

### PPHD — Pull-Through Loads — Rated Sheathing Panels

Model No.	Size	Load Description	Reference Pull-Through Loads (lb.)					
			Minimum Nominal Panel Thickness (in.)					
			Plywood			OSB		
			1 <sup>5</sup> / <sub>32</sub>	1 <sup>9</sup> / <sub>32</sub>	2 <sup>3</sup> / <sub>32</sub>	1 <sup>5</sup> / <sub>32</sub>	1 <sup>9</sup> / <sub>32</sub>	2 <sup>3</sup> / <sub>32</sub>
PPHD11516 PPHDQ11516	#8	ASD	83	84	116	49	109	117
		LRFD	179	181	250	106	235	255
		Nominal Strength	415	420	580	245	545	585
PPHD134 PPHDQ134 PPHD3	#10	ASD	75	85	118	52	111	114
		LRFD	162	184	255	112	240	245
		Nominal Strength	375	425	590	260	555	570
PPHDQ134	#12	ASD	135	154	165	86	140	166
		LRFD	290	330	355	185	305	360
		Nominal Strength	675	770	825	430	701	830

1. The tabulated values are based on testing per ICC-ES AC233.
2. ASD pull-through loads based on a factor of safety of five 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 per NDS 2018, Appendix N using  $K_F = 3.32$ ,  $\phi_c = 0.65$ , and  $\lambda = 1.0$ .
4. PPHDQxxx models have Quik Guard coating; PPHDxxx models have yellow zinc coating.