

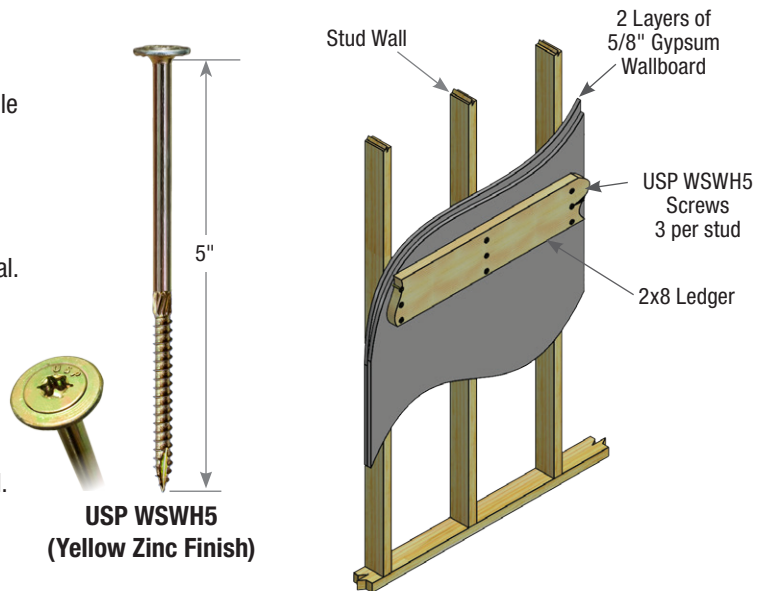


Attaching Ledger-to-Studs with One or Two Layers of 5/8" Gypsum Wallboard

USP WSWH5 Washer Head Screw can be used to attach a ledger to studs through one or two layers of 5/8" gypsum wallboard (drywall). Screws are to be installed into the wide face of the single 2x ledger, through the gypsum board and into the center of the narrow face of the 2x stud.

Installation:

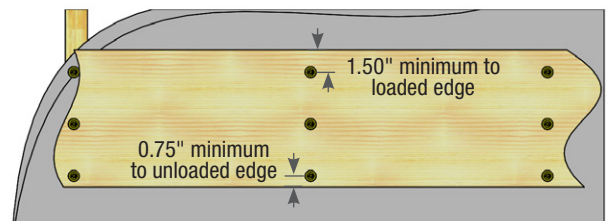
- Ledger design to be performed by a certified design professional.
- Locate studs in wall where ledger is to be installed.
- Install USP WSWH5 screws through ledger and 5/8" gypsum wallboard into wall framing using a T30 Torx bit.
- Follow the Minimum Edge Distance Guidelines in images shown below.
- Wall Design must be performed by certified design professional.
- Care should be taken to install the ledger only where studs are plumb and free of any defects.



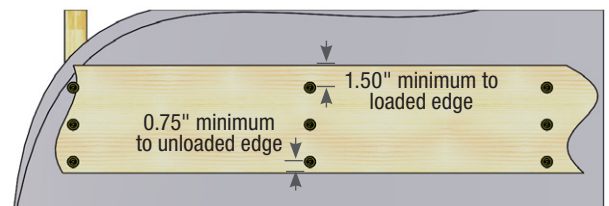
Typical 2x8 Ledger attached through 2 layers of 5/8" Gypsum Wallboard installation

USP Stock No.	Dimensions (in) L	Ledger Size ⁸	Number of Screws per Stud ^{3,7}	Allowable Shear Per Stud (Lbs.) ^{1,4,5,6}	
				DF/SP SG ≥ 0.50	S-P-F/HF 0.42 ≤ SG < 0.50
WSWH5	5	2x6	2	520	455
		2x8	3	860	750
		2x10	3	860	750

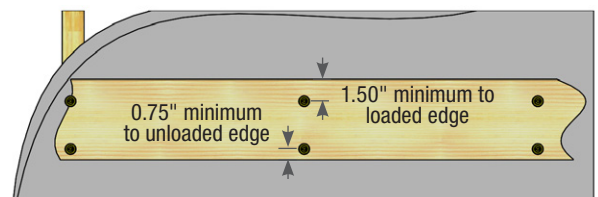
- 1) Allowable Loads are based on DF or equivalent woods members with a specific gravity of .50, SPF/HF values are found using the reductions found in ESR-2761.
- 2) Gypsum board must be attached per building code requirements.
- 3) Screws must be installed in the center of the 2x stud, with a tolerance of 3/16" to either side. Minimum loaded end distance for the stud is 3" and 6" when loaded away from the end. Ledger end distance must be 6" or greater for full values. For ledger end distances between 2" and 6" use 50% of the load table, for end distance between 2" and 4" predrill with a 5/32" bit.
- 4) The values above can be used when designing a ledger connection with (1) or (2) layers of 5/8" gypsum board as well as direct connection with no gypsum between the the ledger and studs.
- 5) Allowable loads are shown above at a load duration factor of CD = 1.00. Loads may be increased where applicable to the current NDS.
- 6) For LRFD values, the values above should be adjusted in accordance with NDS, Section 10.3.
- 7) Main members (stud) shall be loaded parallel to grain with a minimum penetration of 2-1/2" while side members (ledger) shall be loaded perpendicular to grain with a minimum penetration of 1-1/2".
- 8) For 2x10 ledger members with 3 screws, use 2x8 values. Spacing and edge distances shown in the illustrations are minimum values.
- 9) Ledger connections shown in tech bulletin are for download only.



2x10 Detail



2x8 Detail



2x6 Detail

Customer Service & Technical Assistance

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