

**TABLE 2306.3(4)**  
**WOOD STRUCTURAL PANEL SHEAR WALLS with Framing of Douglas-Fir Larch or Southern Pine**  
**Allowable (ASD) Shear Capacities (pounds per foot)**

Sheathing Material	Minimum Nominal Panel Thickness (in.)	Minimum Fastener Penetration into Framing or Blocking (in.)	Nail Size (common)	SEISMIC				WIND			
				Panel Edge Fastener Spacing (in.)				Panel Edge Fastener Spacing (in.)			
				6	4	3	2	6	4	3	2
Wood Structural Panels – Structural I	3/8	1-3/8	8d	200	200	200	200*	322	505	645	855*
	7/16			255	395*	505*	670*	357	552	707	937*
	15/32			280	430*	550*	730*	392	602	770	1022*
	15/32	1-1/2	10d	340	510*	665*	870*	475	715	930*	1217*
Wood Structural Panels – Sheathing (DOC PS 1 or PS 2)	3/8	1-1/4	6d	200	200	200	200*	280	420	545	715*
	3/8	1-3/8	8d	200	200	200	200*	307	447	575	742*
	7/16			240	350	450*	585*	335	490	630	820*
	15/32			260	380*	490*	640*	365	532	685	895*
	15/32	1-1/2	10d	310	460*	600*	770*	435	645	840*	1077*
	19/32			340	510*	665*	870*	475	715	930*	1217*
Plywood Siding	3/8	1-1/4	6d	140	200	200	200*	195	295	385	505*
		1-3/8	8d	160	200	200	200*	225	335	435	575*

\* Framing members and blocking at adjoining panel edges shall be 3” nominal or greater per AWC SDPWS Section 4.3.7.1, item 5.

- a. Where panels are applied on both faces of a wall and nail spacing is less than 6” on center on either side, panel joints shall be offset to fall on different framing members, or framing shall be 3” nominal or thicker at adjoining panel edges and nails at all panel edges shall be staggered.
- b. Where the width of framing members is required to be 3” nominal, two 2” nominal members shall be permitted provided they are fastened together to transfer the shear between members.
- c. Where 3/8” or 7/16” sheathing is used, studs shall not be spaced more than 16” on center. Otherwise, studs shall not be spaced at more than 24” on center.
- d. Where studs are spaced at 24” on center, nailing to intermediate framing shall be spaced at 6” on center maximum. Where studs are spaced less than 24” on center, nailing to intermediate framing shall be spaced at 12” on center maximum.
- e. Steel plate washers shall be provided at foundation anchor bolts as required by AWC SDPWS Section 4.3.6.4.3. When required, plate washers shall not be less than 0.229"x3"x3" in size. The hole in the plate washer shall be permitted to be diagonally slotted with a width of up to 3/16" larger than the bolt diameter and a slot length not to exceed 1-3/4", provided a standard cut washer is placed between the plate washer and the nut.
- f. Allowable shear values for 7/16” sheathing are permitted to be increased to values shown for 15/32” sheathing with the same nailing provided panels are applied with long dimension across studs.
- g. Galvanized nails shall be hot dipped or tumbled.
- h. Nails shall be placed not less than 1/2” in from panel edges and not less than 3/8” from the edge of the connecting members for shears greater than 350 plf. Nails shall not be placed not less than 3/8” from panel edges and not less than 1/4” from the edge of the connecting members for shears of 350 plf or less.
- i. See AWC SDPWS for the following: For general construction requirements see 4.3.6. For specific requirements for wood structural panel shearwalls see 4.3.7.1. For shear wall aspect ratios and capacity adjustments see 4.3.4. For the apparent shear stiffness values ( $G_a$ ), see Table 4.3A. See Appendix A for common nail dimensions.
- j. For species and grades of framing other than Douglas-Fir-Larch or Southern Pine, reduced nominal unit shear capacities shall be determined by multiplying the tabulated nominal unit shear capacity by the Specific Gravity Adjustment Factor =  $[1-(0.5-G)]$ , where  $G$  = Specific Gravity of the framing lumber from the NDS (Table 12.3.3A). The Specific Gravity Adjustment Factor shall not be greater than 1.