

Table 4.3A Nominal Unit Shear Capacities for Sheathed Wood-Frame Shear Walls ^{1,3,6}

Wood-based Panels ⁴															
Sheathing Material	Minimum Nominal Panel Thickness (in.)	Minimum Nail Bearing Length in Framing Member or Blocking, ℓ_m (in.)	Nail Type & Size ⁹ Length (in.) x Shank diameter (in.) x Head diameter (in.)	Panel Edge Nail Spacing (in.)											
				6			4			3			2		
				v_n (plf)	G_a (kips/in.)		v_n (plf)	G_a (kips/in.)		v_n (plf)	G_a (kips/in.)		v_n (plf)	G_a (kips/in.)	
				OSB	PLY		OSB	PLY		OSB	PLY		OSB	PLY	
Wood Structural Panels - Structural I ^{4,5}	5/16	1-1/4	6d common nail (2 x 0.113 x 0.266) ⁸	560	13	10	840	18	13	1090	23	16	1430	35	22
	3/8 ²	1-3/8	8d common nail (2-1/2 x 0.131 x 0.281) ⁸	645	19	14	1010	24	17	1290	30	20	1710	43	24
	7/16 ²			715	16	13	1105	21	16	1415	27	19	1875	40	24
	15/32	1-1/2	10d common nail (3 x 0.148 x 0.312) ^{8,10}	785	14	11	1205	18	14	1540	24	17	2045	37	23
15/32	950			22	16	1430	29	20	1860	36	22	2435	51	28	
Wood Structural Panels - Sheathing ^{4,5}	5/16	1-1/4	6d common nail (2 x 0.113 x 0.266) ⁸	505	13	9.5	755	18	12	980	24	14	1260	37	18
	3/8			560	11	8.5	840	15	11	1090	20	13	1430	32	17
	3/8 ²	1-3/8	8d common nail (2-1/2 x 0.131 x 0.281) ⁸	615	17	12	895	25	15	1150	31	17	1485	45	20
	7/16 ²			670	15	11	980	22	14	1260	28	17	1640	42	21
	15/32			730	13	10	1065	19	13	1370	25	15	1790	39	20
	15/32	1-1/2	10d common nail (3 x 0.148 x 0.312) ^{8,10}	870	22	14	1290	30	17	1680	37	19	2155	52	23
19/32	950			19	13	1430	26	16	1860	33	18	2435	48	22	

2021 Special Design Provisions For Wind And Seismic

