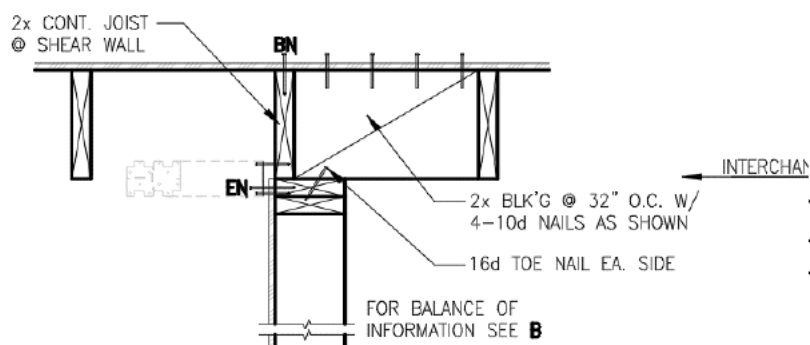


Wood Framed Wall "End Blocking" PER ASCE 7-10 AND NDS-2015

Wall Height Below Parapet or Wall Height Above	8.00	ft.	
Weight of wall	15	psf.	☐ Parapet
S_{DS}	1.757	(Sec 11.4.4)	
K_a	1.00	(Sec 12.11.2.1)	
I_e	1	(Sec 11.5.1)	
Wind Load	17.90	psf. (LRFD)	
F_p	10.5	psf. (Sec 12.11.2.1)	
$F_{p(min1)}$	3.00	psf. (Sec 12.11.2.1)	
$F_{p(min2)}$	5.00	psf. (5 psf min. - Sec 1.4.5)	
$F_{p(min3)}$	3.00	psf. (0.2 x Wall weight - Sec 1.4.5)	
Governing Lateral Load F_p	17.9	psf. (LRFD)	
Force per foot of wall	143	plf. (LRFD)	
Force per foot of wall	100	plf. (ASD)	
16d Toe Nail Capacity	156.8	lb. including 1.6 factor	

Input
Output

Wall	# Toe Nails	Total Nail Capacity (lb)	Max. Spacing of Blocking (in)
2x4 wall	2	313.6	38
2x6 wall	4	627.2	75



Reference Lateral Design V_a
for Sawn Lumber or SCL with b

Nail Type	Nail Diameter D in.	Nail Length L in.	L_s in.	L_m in.	G=0.67 Red Oak	G=0.55 Mixed Maple Southern Pine	G=0.5 Douglas Fir-Larch
					lbs	lbs	lbs
Box	0.099	2	0.67	1.07	60	50	46
	0.113	2.5	0.83	1.33	78	66	60
	0.128	3	1.00	1.60	101	84	77
	0.135	3.5	1.17	1.86	112	94	86
	0.148	4	1.33	2.13	128	107	98
	0.162	5	1.67	2.66	153	128	117
Common	0.113	2	0.67	1.07	78	65	57
	0.131	2.5	0.83	1.33	105	88	80
	0.148	3	1.00	1.60	128	107	98
	0.162	3.5	1.17	1.86	153	128	117
Sinker	0.099	2.125	0.71	1.13	60	50	46
	0.113	2.375	0.79	1.27	78	66	60
	0.120	2.875	0.96	1.53	88	74	68
	0.135	3.125	1.04	1.67	112	94	86
	0.148	3.250	1.08	1.73	128	107	98