

Wind and ASCE Seismic Design A & B

MiTek Stock No.	Ref. No.	L (in)	Min Embed Depth (in)		Ledger / Plate Size	Nails						Bolts						
			Concrete	Masonry		Fastener Schedule		Allowable Tension 160%				Fastener Schedule		Allowable Tension 160%				
						Min Qty ^{4,5,7,8}	Type	Uncracked Concrete	Cracked Concrete	Min Qty ^{4,5,7,8}	Type	Masonry	Min Qty ^{4,5,7,8}	Bolt Dia. (in)	Uncracked Concrete	Cracked Concrete	Masonry	
PA18	PA18	18-1/2	4	6	None	12	16d	2975	2770	12	16d	2680	2	1/2	2240	2240	2240	
					2x & 3x					11							2000	
					4x					10							2480	
PA23	PA23	23-3/4	4	6	None	15	16d	3720	2770	12	16d	2680	3	1/2	3360	2770	2680	
					2x & 3x													2240
					4x													2240
PA28	PA28	29	4	6	None, 2x, 3x, 4x	15	16d	3720	2770	12	16d	2680	4	1/2	3960	2770	2680	
PA35	PA35	35	4	6	None, 2x, 3x, 4x	15	16d	3720	2770	12	16d	2680	4	1/2	3960	2770	2680	
HPA28	HPA28	29	6	8	None, 2x, 3x, 4x	21	16d	4715	3300	12	16d	2680	4	1/2	4545	3300	2680	
HPA35	HPA35	35	6	8	None, 2x, 3x, 4x	23	16d	4715	3300	12	16d	2680	4	1/2	4545	3300	2680	
PAI18	PAI18	18-1/2	4	6	None	12	10d x 1-1/2	2555	2555	12	10d x 1-1/2	2555	--	--	--	--	--	
					2x & 3x					9								1915
					4x					10								2130
PAI23	PAI23	23-1/2	4	6	None	18	10d x 1-1/2	3830	2770	18	10d x 1-1/2	3830	--	--	--	--	--	
					2x & 3x					15								3190
					4x					13								2680
PAI28	PAI28	28-1/2	4	6	None	21	10d x 1-1/2	3960	2770	22	10d x 1-1/2	4680	--	--	--	--	--	
					2x & 3x					21								4470
					4x					18								2680
PAI35	PAI35	35-1/2	4	6	None	26	10d x 1-1/2	3960	2770	26	10d x 1-1/2	5535	--	--	--	--	--	
					2x & 3x					25								5320
					4x					23								2680

ASCE Seismic Design C-F

MiTek Stock No.	Ref. No.	L (in)	Min Embed Depth (in)		Ledger / Plate Size	Nails						Bolts						
			Concrete	Masonry		Fastener Schedule		Allowable Tension 160%				Fastener Schedule		Allowable Tension 160%				
						Min Qty ^{4,5,7,8}	Type	Uncracked Concrete	Cracked Concrete	Min Qty ^{4,5,7,8}	Type	Masonry	Min Qty ^{4,5,7,8}	Bolt Dia. (in)	Uncracked Concrete	Cracked Concrete	Masonry	
PA18	PA18	18-1/2	4	6	None	12	16d	2975	2425	12	16d	2680	2	1/2	2240	2240	2240	
					2x & 3x					11							2000	
					4x					10							2480	
PA23	PA23	23-3/4	4	6	None	15	16d	3365	2425	12	16d	2680	3	1/2	3360	2425	2680	
					2x & 3x													2240
					4x													2240
PA28	PA28	29	4	6	None, 2x, 3x, 4x	15	16d	3365	2425	12	16d	2680	4	1/2	3365	2425	2680	
PA35	PA35	35	4	6	None, 2x, 3x, 4x	15	16d	3365	2425	12	16d	2680	4	1/2	3365	2425	2680	
HPA28	HPA28	29	6	8	None, 2x, 3x, 4x	21	16d	4125	2890	12	16d	2680	4	1/2	4125	2890	2680	
HPA35	HPA35	35	6	8	None, 2x, 3x, 4x	23	16d	4125	2890	12	16d	2680	4	1/2	4125	2890	2680	
PAI18	PAI18	18-1/2	4	6	None	12	10d x 1-1/2	2555	2425	12	10d x 1-1/2	2555	--	--	--	--	--	
					2x & 3x					9								1915
					4x					10								2130
PAI23	PAI23	23-1/2	4	6	None	18	10d x 1-1/2	3365	2425	18	10d x 1-1/2	3830	--	--	--	--	--	
					2x & 3x					15								3190
					4x					13								2680
PAI28	PAI28	28-1/2	4	6	None	21	10d x 1-1/2	3365	2425	22	10d x 1-1/2	4680	--	--	--	--	--	
					2x & 3x					21								4470
					4x					18								2680
PAI35	PAI35	35-1/2	4	6	None	26	10d x 1-1/2	3365	2425	26	10d x 1-1/2	5535	--	--	--	--	--	
					2x & 3x					25								5320
					4x					23								2680

- 1) Allowable loads have been increased 60% for wind or seismic loads; no further increase shall be permitted.
- 2) Allowable loads for bolts are based on parallel-to-grain loading with 3" minimum member thickness, except HPA which requires a 3-1/2" thick wood member.
- 3) Allowable loads are based on the use of either nails or bolts; nail and bolt values cannot be combined.
- 4) 16d sinkers or 10d common nails may be substituted for the specified 16d common nails at 0.85 of the table loads.
- 5) For alternate nail schedule and load values consult MiTek.
- 6) Minimum quantity of fasteners to be installed. Product may have additional fastener holes not needed to meet published allowable load of product.
- 7) **NAILS:** 10d x 1-1/2 nails are 0.148" dia. x 1-1/2" long, 16d nails are 0.162" dia. x 3-1/2" long.