

# POLE BUILDING HANDOUT

Unheated, Detached, Residential Accessory Building, Smooth Metal Roof, Slope = 4:12

Sand, Silty Sand or Clayey Sand Soil Types, **Ground Snow Load = 70 psf**

Post Spacing	Grade	20 Foot Wide Building		24 Foot Wide Building		28 Foot Wide Building		30 Foot Wide Building	
		Truss Carrier Beam	Footing Size	Truss Carrier Beam	Footing Size	Truss Carrier Beam	Footing Size	Truss Carrier Beam	Footing Size
4 FEET	A	1.75" x 5.5"	15" dia.	1.75" x 5.5"	16" dia.	1.75" x 5.5"	18" dia.	1.75" x 5.5"	19" dia.
	B	2" x 10"		2" x 10"		2" x 10"		2" x 12"	
	C	2" x 8"		2" x 8"		2" x 10"		2" x 12"	
6 FEET	A	1.75" x 7.25"	18" dia.	1.75" x 7.25"	20" dia.	1.75" x 9.25"	22" dia.	1.75" x 9.25"	23" dia.
	B	2 - 2" x 10"		2 - 2" x 10"		2 - 2" x 10"		2 - 2" x 12"	
	C	2 - 2" x 10"		2 - 2" x 10"		2 - 2" x 10"		2 - 2" x 12"	
8 FEET	A	1.75" x 9.25"	21" dia.	1.75" x 9.25"	23" dia.	1.75" x 11.25"	25" dia.	1.75" x 11.25"	26" dia.
	B	2 - 2" x 12"		3 - 2" x 10"		3 - 2" x 12"		3 - 2" x 12"	
	C	2 - 2" x 12"		3 - 2" x 10"		3 - 2" x 12"		3 - 2" x 12"	
10 FEET	A	1.75" x 11.25"	24" dia.	1.75" x 11.875"	26" dia.	2 - 1.75" x 9.5"	28" dia.	2 - 1.75" x 9.5"	29" dia.
	B	3 - 2" x 12"		4 - 2" x 12"		5 - 2" x 12"		5 - 2" x 12"	
	C	3 - 2" x 12"		4 - 2" x 12"		4 - 2" x 12"		4 - 2" x 12"	
12 FEET	A	2 - 1.75" x 9.25"	26" dia.	2 - 1.75" x 11.25"	28" dia.	2 - 1.75" x 11.25"	31" dia.	2 - 1.75" x 11.25"	32" dia.
	B	5 - 2" x 12"		5 - 2" x 12"		6 - 2" x 12"		No	
	C	4 - 2" x 12"		5 - 2" x 12"		5 - 2" x 12"		6 - 2" x 12"	
14 FEET	A	2 - 1.75" x 11.25"	28" dia.	2 - 1.75" x 11.875"	31" dia.	3 - 1.75" x 11.25"	33" dia.	3 - 1.75" x 11.25"	34" dia.
	B	6 - 2" x 12"		No		No		No	
	C	5 - 2" x 12"		6 - 2" x 12"		No		No	
16 FEET	A	3 - 1.75" x 11.25"	30" dia.	3 - 1.75" x 11.25"	33" dia.	3 - 1.75" x 11.875"	35" dia.	4 - 1.75" x 11.25"	37" dia.
	B	No		No		No		No	
	C	No		No		No		No	
18 FEET	A	3 - 1.75" x 11.25"	32" dia.	4 - 1.75" x 11.25"	35" dia.	4 - 1.75" x 11.875"	37" dia.	3 - 1.75" x 14"	39" dia.
	B	No		No		No		No	
	C	No		No		No		No	

Post Spacing	Grade	32 Foot Wide Building		36 Foot Wide Building		40 Foot Wide Building		50 Foot Wide Building	
		Truss Carrier Beam	Footing Size	Truss Carrier Beam	Footing Size	Truss Carrier Beam	Footing Size	Truss Carrier Beam	Footing Size
4 FEET	A	1.75" x 5.5"	19" dia.	1.75" x 7.25"	20" dia.	1.75" x 7.25"	21" dia.	1.75" x 7.25"	24" dia.
	B	2" x 12"		2" x 12"		2 - 2" x 10"		2 - 2" x 10"	
	C	2" x 12"		2" x 12"		2" x 12"		2 - 2" x 10"	
6 FEET	A	1.75" x 9.25"	23" dia.	1.75" x 9.25"	25" dia.	1.75" x 9.25"	26" dia.	1.75" x 11.25"	29" dia.
	B	2 - 2" x 12"		3 - 2" x 10"		3 - 2" x 10"		3 - 2" x 12"	
	C	2 - 2" x 12"		3 - 2" x 12"		3 - 2" x 10"		3 - 2" x 12"	
8 FEET	A	1.75" x 11.25"	27" dia.	1.75" x 11.875"	28" dia.	2 - 1.75" x 9.25"	30" dia.	2 - 1.75" x 11.25"	33" dia.
	B	3 - 2" x 12"		4 - 2" x 12"		4 - 2" x 12"		5 - 2" x 12"	
	C	3 - 2" x 12"		3 - 2" x 12"		4 - 2" x 12"		5 - 2" x 12"	
10 FEET	A	2 - 1.75" x 11.25"	30" dia.	2 - 1.75" x 11.25"	32" dia.	2 - 1.75" x 11.25"	33" dia.	3 - 1.75" x 11.25"	37" dia.
	B	5 - 2" x 12"		5 - 2" x 12"		6 - 2" x 12"		No	
	C	5 - 2" x 12"		5 - 2" x 12"		6 - 2" x 12"		No	
12 FEET	A	2 - 1.75" x 11.875"	33" dia.	3 - 1.75" x 11.25"	35" dia.	3 - 1.75" x 11.25"	37" dia.	4 - 1.75" x 11.25"	41" dia.
	B	No		No		No		No	
	C	6 - 2" x 12"		No		No		No	
14 FEET	A	3 - 1.75" x 11.25"	35" dia.	3 - 1.75" x 11.875"	37" dia.	4 - 1.75" x 11.25"	39" dia.	3 - 1.75" x 14"	44" dia.
	B	No		No		No		No	
	C	No		No		No		No	
16 FEET	A	4 - 1.75" x 11.25"	38" dia.	4 - 1.75" x 11.875"	40" dia.	4 - 1.75" x 14"	42" dia.	4 - 1.75" x 14"	47" dia.
	B	No		No		No		No	
	C	No		No		No		No	
18 FEET	A	4 - 1.75" x 14"	40" dia.	4 - 1.75" x 14"	42" dia.	4 - 1.75" x 14"	45" dia.	4 - 1.75" x 16"	50" dia.
	B	No		No		No		No	
	C	No		No		No		No	

**Lumber Grade Legend**

A - Laminated Veneer Lumber, Fo = 2,600 psi, Fv = 285 psi, E = 1,900,000 psi

B - Hem-Fir #2, Fo = 850 psi, Fv = 150 psi, E = 1,300,000 psi

C - Southern Yellow Pine #2, Fo = 975 psi, Fv = 175 psi, E = 1,600,000 psi

