

# RESIDENTIAL POLE BARN

Roof Covering- \_\_\_\_\_

Roof Deck- \_\_\_\_\_

**Truss Or Rafter Ties May Be Required**

Trusses: Yes \_\_\_ No \_\_\_

If no fill out rafter information below

Truss/Rafter Block Size: \_\_\_\_\_

Rafter Size: \_\_\_\_\_

Rafter Spacing: \_\_\_\_\_

Ridge Size: \_\_\_\_\_

Ceiling Joist Size: \_\_\_\_\_

Ceiling Joist Spacing: \_\_\_\_\_

Pole Size: \_\_\_\_\_

Pole Spacing: \_\_\_\_\_

Ceiling Height: \_\_\_\_\_

Roof Peak Height: \_\_\_\_\_

Insulation Materials: \_\_\_\_\_

Finish Materials: \_\_\_\_\_

Carrier Size- \_\_\_\_\_

Wall Purlins- \_\_\_\_\_

Type Of Siding- \_\_\_\_\_

Skirt Board Size - \_\_\_\_\_

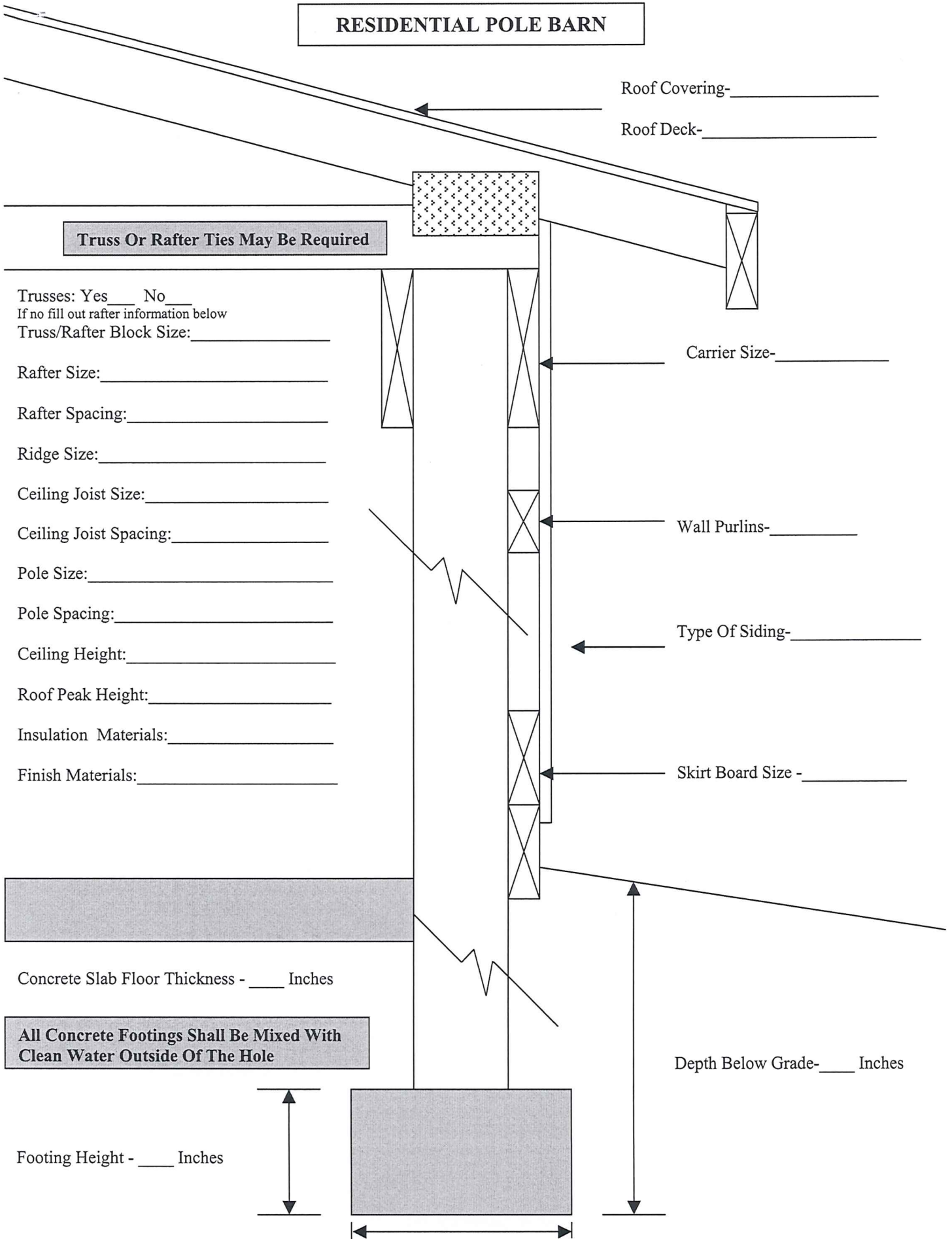
Concrete Slab Floor Thickness - \_\_\_ Inches

**All Concrete Footings Shall Be Mixed With Clean Water Outside Of The Hole**

Footing Height - \_\_\_ Inches

Depth Below Grade- \_\_\_ Inches

Footing Width- \_\_\_ Inches



# POLE BUILDING HANDOUT

Unheated, Detached, Residential Accessory Building, Smooth Metal Roof, Slope = 4:12  
 Sand, Silt or Clay Sand Soil Types, Ground Snow Load = 60/70 psf From Figure R301.2 (5) MCR or MRC table R301.2(5)

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. (8" thick)	1.75" x 5.5"	16" dia. (8" thick)	1.75" x 5.5"	18" dia. (8" thick)	1.75" x 5.5"	19" dia. (8" thick)
	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. (8" thick)	1.75" x 7.25"	20" dia. (8" thick)	1.75" x 9.25"	22" dia. (8" thick)	1.75" x 9.25"	23" dia. (10" thick)
	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. (8" thick)	1.75" x 9.25"	23" dia. (10" thick)	1.75" x 11.25"	25" dia. (10" thick)	1.75" x 11.25"	26" dia. (10" thick)
	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. (10" thick)	1.75" x 11.875"	26" dia. (10" thick)	2 - 1.75" x 9.5"	28" dia. (10" thick)	2 - 1.75" x 9.5"	29" dia. (10" thick)
	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. (10" thick)	2 - 1.75" x 11.25"	28" dia. (10" thick)	2 - 1.75" x 11.25"	31" dia. (10" thick)	2 - 1.75" x 11.25"	32" dia. (10" thick)
	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. (10" thick)	2 - 1.75" x 11.875"	31" dia. (10" thick)	3 - 1.75" x 11.25"	33" dia. (10" thick)	3 - 1.75" x 11.25"	34" dia. (10" thick)
	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. (10" thick)	3 - 1.75" x 11.25"	33" dia. (10" thick)	3 - 1.75" x 11.875"	35" dia. (12" thick)	4 - 1.75" x 11.25"	37" dia. (12" thick)
	B	No		No		No		No	
	C	No		No		No		No	
18 FEET	A	3 - 1.75" x 11.25"	32" dia. (10" thick)	4 - 1.75" x 11.25"	35" dia. (12" thick)	4 - 1.75" x 11.875"	37" dia. (12" thick)	3 - 1.75" x 14"	39" dia. (12" thick)
	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. (8" thick)	1.75" x 7.25"	20" dia. (8" thick)	1.75" x 7.25"	21" dia. (8" thick)	1.75" x 7.25"	24" dia. (10" thick)
	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. (10" thick)	1.75" x 9.25"	25" dia. (10" thick)	1.75" x 9.25"	26" dia. (10" thick)	1.75" x 11.25"	29" dia. (10" thick)
	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. (10" thick)	1.75" x 11.875"	28" dia. (10" thick)	2 - 1.75" x 9.25"	30" dia. (10" thick)	2 - 1.75" x 11.25"	33" dia. (10" thick)
	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. (10" thick)	2 - 1.75" x 11.25"	32" dia. (10" thick)	2 - 1.75" x 11.25"	33" dia. (10" thick)	3 - 1.75" x 11.25"	37" dia. (12" thick)
	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. (10" thick)	3 - 1.75" x 11.25"	35" dia. (12" thick)	3 - 1.75" x 11.25"	37" dia. (12" thick)	4 - 1.75" x 11.25"	41" dia. (12" thick)
	B	No		No		No		No	
	C	6 - 2" x 12"		No		No		No	
14 FEET	A	3 - 1.75" x 11.25"	35" dia. (12" thick)	3 - 1.75" x 11.875"	37" dia. (12" thick)	4 - 1.75" x 11.25"	39" dia. (12" thick)	3 - 1.75" x 14"	44" dia. (12" thick)
	B	No		No		No		No	
	C	No		No		No		No	
16 FEET	A	4 - 1.75" x 11.25"	38" dia. (12" thick)	4 - 1.75" x 11.875"	40" dia. (12" thick)	4 - 1.75" x 14"	42" dia. (12" thick)	4 - 1.75" x 14"	47" dia. (12" thick)
	B	No		No		No		No	
	C	No		No		No		No	
18 FEET	A	4 - 1.75" x 14"	40" dia. (12" thick)	4 - 1.75" x 14"	42" dia. (12" thick)	4 - 1.75" x 14"	45" dia. (12" thick)	4 - 1.75" x 16"	50" dia. (12" thick)
	B	No		No		No		No	
	C	No		No		No		No	

**\*\*ALL FOOTINGS 48" TO THE BOTTOM OF THE HOLE.**

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