



Sedgwick County...
working for you

Wichita-Sedgwick County Metropolitan Area Building and Construction Department

POST AND FRAME (POLE BARN) CONSTRUCTION

MINIMUM STANDARDS

SPACING OF POSTS OR COLUMNS

Douglas fir or Southern Pine (Treated for Ground Contact)
All Poles 5" Rough Cut or Larger

Poles Spaced 8' on Center

- 2X4 Purlins
- 2X4 Girts – Side
- 2X12 Double Header
- Engineered Trusses 4' on Center

Poles Spaced 10' on Center

- 2X4 Purlins
- 2X6 Girts – Side
- 2X12 Double Header
- Engineered Trusses 5' on Center

DIAMETER OF BORED HOLES	
Width of Building	Diameter and Depth
24 ft	12 in / 4ft
30 ft	14 in / 4 ft
36 ft	16 in / 4 ft
40 ft	17 in / 4 ft

One Bag of Quikrete in Bottom of Hole or Concrete Cookie Pole Holes to be Back Filled with Sand, Road Gravel or Dirt

Sidewall and Headers

Wood to Carry Grade Stamp of #2 and Better

Girts to be Spaced 30" on Center with Bottom Girt to be Treated for Below Ground Contact

Purlins to be 2X4s at 24" on Center up the Slope of the Roof; Wood to Carry a Grade Stamp of Standard and Better.

All Metal Sheeting to be 29 Gauge Steel or Better

14' **MAXIMUM** Side Wall Height*

42' **MAXIMUM** Width* 60' **MAXIMUM** Length*

*If building exceeds any one of these dimensions, plans shall be sealed by a State of Kansas licensed engineer.

Table 32.1 MAXIMUM HEADER SPANS (FT. – IN.) – D.FIR-L, HEM-FIR AND S.Y.P., No.2 GRADE Headers (Exterior Bearing Walls)

Headers Supporting	Size	Roof Live Load (psf)											
		20			30			40			50		
		Building Width (ft)			Building Width (ft)			Building Width (ft)			Building Width (ft)		
Roof and Ceiling		20	28	36	20	28	36	20	28	36	20	28	36
	2-2x4	3-6	3-2	2-10	3-3	2-10	2-7	3-0	2-7	2-4	2-10	2-5	2-2
	2-2x6	5-5	4-8	4-2	4-10	4-2	3-9	4-5	3-10	3-5	4-1	3-7	3-2
	2-2x8	6-10	5-11	5-4	6-2	5-4	4-9	5-7	4-10	4-4	5-2	4-6	4-0
	2-2x10	8-5	7-3	6-6	7-6	6-6	5-10	6-10	5-11	5-4	6-4	5-6	4-11
	2-2x12	9-9	8-5	7-6	8-8	7-6	6-9	7-11	6-10	6-2	7-4	6-4	5-8
	3-2x8	8-4	7-5	6-8	7-8	6-8	5-11	7-0	6-1	5-5	6-6	5-8	5-0
	3-2x10	10-6	9-1	8-2	9-5	8-2	7-3	8-7	7-5	6-8	7-11	6-10	6-2
	3-2x12	12-2	10-7	9-5	10-11	9-5	8-5	9-11	8-7	7-8	9-2	8-0	7-2
	4-2x8	9-2	8-4	7-8	8-6	7-8	6-11	8-0	7-0	6-3	7-6	6-6	5-10
	4-2x10	11-8	10-6	9-5	10-10	9-5	8-5	9-11	8-7	7-8	9-2	7-11	7-1
	4-2x12	14-1	12-2	10-11	12-7	10-11	9-9	11-6	9-11	8-11	10-8	9-2	8-3

The U.S. Span Book for Major Lumber Species

155

Headers

U.S. Spans for U.S. Species

These are guidelines only. Metropolitan Area Building and Construction Department are not responsible for loss or failure.