

POLE SPECIFICATIONS:

Minimum diameter at breast height (outside bark)^{1/} of trees to meet American National Standard specifications for various classes of southern pine poles

Pole length (feet)	Dist. Butt to Ground Line	Pole Class						
		1	2	3	4	5	6	7
		Minimum Top Circum. (inches)						
		27	25	23	21	19	17	15
		Minimum Top Diameter (inches)						
		8.6	8.0	7.3	6.7	6.0	5.4	4.8
	Feet	Inches (Dbh-ob)						
20	4	11.2	10.5	9.8	9.0	8.3	7.6	7.1
25	5	12.1	11.4	10.7	9.9	9.2	8.3	7.8
30	5 1/2	13.2	12.3	11.6	10.7	9.9	9.0	8.5
35	6	14.1	13.2	12.3	11.4	10.5	9.8	9.0
40	6	14.8	13.9	13.0	12.1	11.2	10.3	9.6
45	6 1/2	15.6	14.6	13.6	12.7	11.8	10.9	10.1
50	7	16.3	15.2	14.1	13.2	12.3	11.4	10.5
55	7 1/2	16.8	15.7	14.6	13.7	12.7	11.8	---
60	8	17.4	16.3	15.2	14.1	13.0	12.1	---
65	8 1/2	17.9	16.6	15.6	14.6	13.6	---	---
70	9	18.4	17.4	16.3	15.0	13.9	---	---
75	9 1/2	19.0	17.7	16.6	15.6	---	---	---
80	10	19.5	18.3	17.0	15.9	---	---	---
85	10 1/2	19.9	18.6	17.4	---	---	---	---
90	11	20.3	19.2	17.7	---	---	---	---
95	11	20.6	19.5	18.1	---	---	---	---

^{1/} D.B.H. = $\frac{\text{Minimum Circumference 6' from butt}}{.88 \times 3.1416}$

Source: Hawes, E. T. 1947. A method of determining southern pine pole classes from d.b.h. Jour. Forestry 45: 204,205 illus.

SIZE, CUBIC VOLUME AND BOARD FOOT VOLUME
IN PINE POLES

Class and Min. Circum. and Equiv. Diameter (Inches)	Length (Feet)	Vol. (Cu. Feet)	Average Volume, Board Feet, Int'l. Rule 1/4"	Average Volume, Board Ft., Scribner Rule, Form Class 80	Min. Circum. and Diameter to 6 feet of First Log Circum.Diam.	
Class 1						
27" Circum. 8.59" Diam.	25	15.3	86	75	33.5	10.66
	30	20.4	114	125	36.5	11.62
	35	26.2	153	155	39.0	12.41
	40	32.6	182	205	41.0	13.05
	45	39.3	217	245	43.0	13.69
	50	46.6	271	280	45.0	14.32
	55	54.3	306	335	46.5	14.80
	60	62.6	342	385	48.0	15.28
	65	71.1	397	420	49.5	15.76
	70	80.1	441	495	51.0	16.23
	75	89.5	486	535	52.5	16.71
Class 2						
25" Circum. 7.96 Diam.	25	13.2	74	60	31.5	10.03
	30	17.8	96	105	34.0	10.82
	35	22.8	131	135	36.5	11.62
	40	28.2	158	175	38.5	12.25
	45	34.1	189	210	40.5	12.89
	50	40.4	231	240	42.0	13.37
	55	47.1	261	295	43.5	13.85
	60	54.2	295	325	45.0	14.32
	65	61.6	344	365	46.5	14.80
	70	69.5	381	425	48.0	15.28
	75	77.7	410	500	49.0	15.60
Class 3						
23" Circum. 7.32" Diam.	25	11.5	63	70	29.5	9.39
	30	15.4	82	85	32.0	10.19
	35	19.7	107	115	34.0	10.82
	40	24.5	135	150	36.0	11.46
	45	29.5	157	180	37.5	11.94
	50	35.0	194	205	39.0	12.41
	55	40.8	222	250	40.5	12.89
	60	47.0	249	280	42.0	13.37
	65	53.4	294	310	43.5	13.85
	70	60.2	328	340	45.0	14.32
	75	67.3	352	380	46.0	14.64
Class 4						
21" Circum. 6.68" Diam.	25	10.0	53	55	27.5	8.75
	30	13.3	68	70	29.5	9.39
	35	17.1	92	90	31.5	10.03
	40	21.2	112	130	33.5	10.66
	45	25.6	134	145	35.0	11.14
	50	30.4	165	170	36.5	11.62
	55	35.4	189	190	38.0	12.10
	60	40.7	208	215	39.0	12.41
	65	46.4	245	240	40.5	12.89
	70	52.2	277	265	41.5	13.21

(Cont.) Size, Cubic Volume and Board Foot Volume in Pine Poles

Class 5						
19" Circum. 6.05" Diam.	25	8.6	43	45	25.5	8.12
	30	11.6	55	55	27.5	8.75
	35	14.8	75	75	29.0	9.23
	40	18.4	93	100	31.0	9.87
	45	22.2	107	120	32.5	10.35
	50	26.3	137	140	34.0	10.82
Class 6						
17" Circum. 5.41 Diam.	20	5.2	24	20	21.0	6.68
	25	7.5	32	35	23.0	7.32
	30	10.0	43	45	25.0	7.96
	35	12.8	62	65	27.0	8.59
	40	15.9	75	85	28.5	9.07
	45	19.3	90	100	30.0	9.55
Class 7						
15" Circum. 4.77 Diam.	20	4.6	20	15	19.5	6.21
	25	6.4	27	25	21.5	6.84
	30	8.6	36	35	23.5	7.48
	35	11.1	45	55	25.0	7.96
Class 9						
15" Circum. 4.77" Diam.	20	3.2	17	10	17.5	5.57
	25	4.7	24	20	19.5	6.21
	30	6.4	32	25	20.5	6.53
Class 10						
12" Circum. 3.82 Diam.	20	2.8	8	10	14.0	4.46
	25	4.0	14	15	15.0	4.77

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AVERAGE WEIGHTS TREATED LONG LEAF YELLOW PINE POLES

CLASS	1	2	3	4	5	6	7	9	10
20 ft. ----	710	564	467	394	330	284	234	202	161
25 ft. ----	990	811	674	573	490	422	344	289	235

30 ft. ----	1,279	1,082	921	784	660	550	454	371	
35 ft. ----	1,568	1,343	1,155	1,004	862	743	646		
40 ft. ----	1,884	1,623	1,403	1,219	1,059	921	807		
45 ft. ----	2,223	1,911	1,664	1,444	1,274	1,114	976		

50 ft. ----	2,585	2,214	1,925	1,687	1,494	1,329	1,169		
55 ft. ----	2,993	2,567	2,200	1,934	1,719	1,563			
60 ft. ----	3,765	3,210	2,740	2,385	2,130	1,965			
65 ft. ----	4,380	3,645	3,070	2,680	2,440				

70 ft. ----	5,040	4,125	3,430	2,980	2,715				
75 ft. ----	5,670	4,620	3,825	3,295					

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