

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G21.071.1
Issue 2, July, 1953
AT&T Co Standard

**AVERAGE WEIGHTS OF POLES,
STUBS AND ANCHOR LOGS**

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1. GENERAL

1.01 This section provides information in regard to the average weights of poles, stubs and anchor logs.

1.02 It is being reissued to omit Northern White Cedar as a standard species of pole timber. There are no changes in the weights of poles, stubs and anchor logs of the species covered.

2. WESTERN RED CEDAR

Full Length Treated Western Cedar Poles and Guy Stubs

Length (Feet)	Class									
	1	2	3	4	5	6	7	9	10	
	(Pounds)									
16					150	130	110	80	70	
18			240	200	180	150	130	110	80	
20	370	330	280	240	210	180	150	120	110	
22	420	380	330	270	240	210	180	140	120	
25	510	460	400	340	290	250	220	170	150	
30	680	600	530	450	400	350	300	210		
35	870	770	670	580	500	450	400			
40	1070	950	820	700	630	560	490			
45	1280	1120	990	850	770					
50	1520	1330	1160	1010	910					
55	1750	1530	1340	1190	1070					
60	2010	1750	1520	1370						
65	2270	1970	1720	1530						
70	2540	2220	1930	1730						
75	2800	2470	2160	1910						
80	3120	2740	2380	2100						
85	3410	3000	2600							
90	3720	3280	2840							

Full Length Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
	(Pounds)			
10	280	190	120	70
11	380	250	180	120
13	540	380	260	190
15.5	740		420	
19.5	1020		610	

Treated Anchor Logs

Type				
31	51	71	53	83
(Pounds)				
30	60	190	90	210

Butt Treated Western Cedar Poles and Guy Stubs

Length (Feet)	Class									
	1	2	3	4	5	6	7	9	10	
16					140	120	100	80	70	
18			230	190	170	140	120	100	80	
20	350	310	270	230	200	170	140	110	100	
22	400	360	310	260	230	200	170	130	110	
25	490	440	380	320	280	240	210	160	140	
30	650	570	500	430	380	330	290	200		
35	830	730	640	550	480	430	380			
40	1020	900	780	670	600	530	470			
45	1220	1070	940	810	730					
50	1450	1270	1100	960	870					
55	1670	1460	1280	1130	1020					
60	1910	1670	1450	1300						
65	2160	1880	1640	1460						
70	2420	2110	1840	1650						
75	2670	2350	2060	1820						
80	2970	2610	2270	2000						
85	3250	2860	2480							
90	3540	3120	2700							

Butt Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
10	270	180	110	70
11	360	240	170	110
13	510	360	250	180
15.5	700		400	
19.5	970		580	

3. PONDEROSA PINE

Full Length Treated Ponderosa Pine Poles and Guy Stubs

<u>Length</u> (Feet)	<u>Class</u>									
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>9</u>	<u>10</u>	
16					170	150	120	100	80	
18			280	240	210	170	140	120	100	
20	530	420	350	290	240	210	180	150	120	
22	620	500	410	340	300	250	210	170	140	
25	730	600	500	420	360	310	260	210	170	
30	950	800	680	580	490	410	330	270		
35	1160	990	850	740	630	550	470			
40	1400	1200	1040	890	780	680	590			
45	1640	1410	1220	1060	930	810	720			
50	1900	1620	1410	1230	1090	970	850			
55	2190	1880	1610	1410	1260	1140				
60	2540	2150	1840	1600						
65	2940	2450	2050	1790						
70	3380	2760								

Full Length Treated Reinforcing Stubs

<u>Length</u> (Feet)	<u>Class</u>			
	<u>Z</u>	<u>Y</u>	<u>X</u>	<u>W</u>
10	350	220	140	80
11	450	310	210	120
13	660	450	310	210
15.5	870		460	
19.5	1250		690	

Treated Anchor Logs

<u>Type</u>				
<u>31</u>	<u>51</u>	<u>71</u>	<u>53</u>	<u>83</u>
(Pounds)				
40	70	230	110	250

4. LODGEPOLE PINE

Full Length Treated Lodgepole Pine Poles and Guy Stubs

Length (Feet)	Class									
	1	2	3	4	5	6	7	9	10	
	(Pounds)									
16					150	130	110	90	70	
18			250	210	180	150	120	100	80	
20	460	370	310	250	220	180	150	130	100	
22	540	440	360	300	260	220	180	150	120	
25	650	530	440	370	320	270	220	190	150	
30	840	700	600	510	430	360	300	240		
35	1020	870	750	650	550	480	410			
40	1230	1050	910	790	680	590	520			
45	1440	1240	1070	930	820	710	630			
50	1680	1430	1240	1080	960	850	740			
55	1920	1660	1410	1230	1100	1000				
60	2230	1880	1610	1400	1240					

Full Length Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
	(Pounds)			
10	300	190	120	70
11	380	280	180	120
13	570	400	280	190
15.5	720		380	
19.5	1080		610	

Treated Anchor Logs

Type				
31	51	71	53	83
(Pounds)				
30	70	210	110	230

5. JACK PINE

Full Length Treated Jack Pine Poles and Guy Stubs

Length (Feet)	Class									
	1	2	3	4	5	6	7	9	10	
16					160	140	120	100	80	
18			270	230	190	160	130	110	90	
20	490	400	330	270	230	190	160	140	110	
22	580	470	390	320	270	230	190	160	130	
25	690	560	470	400	340	290	240	200	160	
30	890	750	630	540	450	380	310	250		
35	1080	930	800	690	590	510	440			
40	1300	1120	960	830	720	630	550			
45	1530	1310	1140	990	860	760	660			
50	1780	1510	1320	1140	1020	900	790			
55	2030	1750	1500	1310	1170	1050				
60	2360	1990	1710	1480	1320					

Full Length Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
10	310	200	120	80
11	410	290	190	120
13	600	420	300	210
15.5	760		400	
19.5	1144		650	

Treated Anchor Logs

Type				
31	51	71	53	83
(Pounds)				
40	70	230	110	250

6. RED PINE

Full Length Treated Red Pine Poles and Guy Stubs

Length (Feet)	Class								
	1	2	3	4	5	6	7	9	10
	(Pounds)								
16					170	140	120	100	80
18			280	240	200	170	140	110	90
20	510	410	340	280	240	200	170	140	120
22	600	490	400	330	290	240	200	170	140
25	720	590	490	410	350	300	250	210	170
30	920	780	660	560	470	390	330	260	
35	1130	960	830	720	610	530	460		
40	1360	1160	1010	870	750	660	570		
45	1590	1370	1190	1030	900	790	690		
50	1850	1580	1370	1190	1060	930	820		
55	2120	1830	1560	1360	1220	1100			
60	2460	2080	1780	1550	1370				

Full Length Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
	(Pounds)			
10	330	210	130	80
11	420	300	200	130
13	630	440	310	210
15.5	790		420	
19.5	1190		680	

Treated Anchor Logs

Type				
31	51	71	53	83
(Pounds)				
40	80	240	120	260

7. SOUTHERN PINE

Full Length Treated Southern Pine Poles and Guy Stubs

Length (Feet)	Class									
	1	2	3	4	5	6	7	9	10	
16					210	180	150	120	100	
18			340	290	250	210	170	140	120	
20	640	510	420	350	300	250	210	180	140	
22	740	600	500	410	360	300	250	210	170	
25	890	730	610	510	440	380	310	260	210	
30	1140	970	820	700	590	490	410	330		
35	1410	1200	1040	900	770	670	580			
40	1690	1460	1260	1090	950	830	720			
45	1990	1710	1490	1300	1140	1000	880			
50	2320	1980	1730	1510	1340	1190	1050			
55	2670	2300	1970	1730	1540	1400				
60	3100	2640	2250	1960	1750	1610				
65	3600	3000	2520	2200	2000					
70	4150	3390	2820	2450	2230					
75	4660	3800	3150	2710						
80	5260	4250	3480	2970						
85	5920	4730	3850							
90	6690	5270	4240							
95	7150	5650	4560							
100	7810	6140	4950							
105	8460	6630	5330							
110	9130	7140	5730							

Full Length Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
10	400	260	160	100
11	520	370	240	160
13	770	540	380	260
15.5	970		510	
19.5	1470		830	

Treated Anchor Logs

Type				
31	51	71	53	83
(Pounds)				
50	100	310	150	340

8. DOUGLAS FIR

Full Length Treated Douglas Fir Poles and Guy Stubs

Length (Feet)	Class									
	1	2	3	4	5	6	7	9	10	
16					170	140	120	100	80	
18			270	240	200	170	140	110	100	
20	510	410	340	290	240	210	170	140	110	
22	600	490	400	330	290	240	210	170	140	
25	720	590	490	410	350	300	250	210	170	
30	930	780	670	570	480	400	330	270		
35	1140	970	840	730	620	540	470			
40	1370	1180	1020	880	770	670	580			
45	1610	1380	1200	1050	920	810	710			
50	1880	1600	1400	1220	1080	960	850			
55	2160	1860	1600	1400	1250	1130				
60	2500	2140	1820	1590	1420	1300				
65	2910	2420	2040	1780	1620					
70	3350	2740	2280	1980	1810					
75	3770	3070	2550	2190						
80	4250	3440	2820	2400						
85	4790	3820	3120							
90	5410	4260	3430							
95	5820	4610	3720							
100	6360	5000	4030							
105	6890	5400	4340							
110	7430	5820	4660							

Full Length Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
10	320	210	130	80
11	420	300	190	130
13	620	440	310	210
15.5	790		410	
19.5	1190		670	

Treated Anchor Logs

Type				
31	51	71	53	83
(Pounds)				
40	80	240	120	260

9. WESTERN LARCH

Full Length Treated Western Larch Poles and Guy Stubs

Length (Feet)	Class								
	1	2	3	4	5	6	7	9	10
16					170	140	120	100	80
18			270	230	200	170	130	110	90
20	510	400	330	280	230	200	170	140	110
22	590	480	400	330	280	240	200	170	130
25	710	570	480	410	350	300	250	200	170
30	910	770	650	560	470	390	320	260	
35	1110	950	820	710	610	530	460		
40	1340	1150	1000	860	750	660	570		
45	1580	1360	1180	1030	910	790	700		
50	1840	1570	1370	1200	1060	940	830		
55	2120	1820	1560	1370	1220	1110			
60	2460	2090	1790	1560	1390	1280			
65	2860	2380	2000	1740	1590				
70	3290	2690	2230	1940	1770				
75	3690	3010	2490	2150					
80	4170	3370	2760	2350					
85	4690	3740	3060						
90	5300	4180	3360						
95	5700	4510	3640						
100	6230	4900	3950						
105	6750	5300	4250						
110	7280	5700	4570						

Full Length Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
10	320	200	120	80
11	410	290	190	120
13	610	430	300	210
15.5	770		410	
19.5	1160		660	

Treated Anchor Logs

Type				
31	51	71	53	83
(Pounds)				
40	90	270	130	290

Butt Treated Western Larch Poles and Guy Stubs

Length (Feet)	Class									
	1	2	3	4	5	6	7	9	10	
	(Pounds)									
16					160	130	110	90	70	
18			250	220	180	160	120	100	90	
20	480	380	310	260	220	190	160	130	110	
22	550	450	370	310	260	220	190	160	120	
25	660	540	450	380	330	280	230	190	160	
30	850	720	620	520	440	370	300	250		
35	1050	900	770	670	580	500	430			
40	1260	1080	940	810	710	620	540			
45	1490	1280	1110	970	850	750	660			
50	1730	1480	1290	1130	1000	890	780			
55	1990	1720	1470	1290	1150	1040				
60	2310	1970	1680	1460	1310	1200				
65	2690	2240	1880	1640	1500					
70	3090	2530	2100	1820	1660					
75	3480	2830	2350	2020						
80	3920	3170	2600	2220						
85	4420	3520	2880							
90	4990	3930	3160							
95	5370	4250	3430							
100	5860	4620	3720							
105	6360	4980	4000							
110	6860	5360	4300							

Butt Treated Reinforcing Stubs

Length (Feet)	Class			
	Z	Y	X	W
	(Pounds)			
10	300	190	120	70
11	390	280	180	120
13	580	400	280	200
15.5	720		380	
19.5	1090		620	

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