

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G21.356
Issue 1, October, 1931
Standard

POLE LINES

INSPECTION 56 L-J

5600 Pound Fibre Strength **Light Storm Loading Area** **Joint Use Poles**

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1. MINIMUM CIRCUMFERENCES

1.01 The dimensions shown in each inspection table are the minimum circumferences of sound wood at the ground line, failing to meet which a pole should normally be considered inadequate.

1.02 Each table is set up to indicate the minimum circumferences in inches for each combination of wire load, pole length and span length. In referring to the tables the wire load should be taken as that existing at the time of the inspection, together with any expected increase in load before the next inspection.

1.03 The circumferences as measured by the inspector do not allow for hollow heart or pockets in the pole. Where such defects exist, suitable deductions should be made as indicated in Section G21.315, in order to determine the ground line measurement for purposes of comparison with the minimum circumferences in the tables.

1.04 In determining which poles require attention the inspector should compare the corrected circumference measurements, paragraph 1.03, with the appropriate minimum circumferences from the tables, making due allowance for probable decay before the next inspection.

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2. WIRE LOAD REFERENCE

2.01 TELEPHONE WIRE BASE. The "Equivalent Wire Load" should be computed in terms of effective 104 telephone wires, and reference made to the table by means of the LEFT HAND COLUMN.

2.02 POWER WIRE BASE. The "Equivalent Wire Load" should be computed in terms of No. 4 covered power wires, and reference made to the table by means of the RIGHT HAND COLUMN.

WIRE LOAD REFERENCE
LEFT HAND COLUMN
RIGHT HAND COLUMN
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NOTE: REFER



POLE LINE INSPECTION TABLE 56 L-J

**5600 Pound Fibre Strength
Light Storm Loading Area**

**Class J Line—Joint Use with Supply Circuits—
Open Wire or Cable**

Equivalent Wire Load Telephone Wires	L'gth of Pole in Feet	Minimum Ground Line Circumferences in Inches								L'gth of Pole in Feet	Equivalent Wire Load Power Wires	
		Length of Span in Feet										
		100	110	130	150	175	200	250	300			
1-10	16	11	11	11	11	11	11	11	12	12	16	1-3
	20	11	11	11	11	11½	12	13	13½	13½	20	
	25	11½	11½	12	12½	13	13½	14	14½	14½	25	
	30	13	13	13½	14	14	14½	15½	16½	16½	30	
	35	14	14	14½	15	15½	16	17	17½	17½	35	
	40	16	16	16½	17	17½	17½	18½	19½	19½	40	
	45	17	17½	17½	17½	18½	18½	19½	20½	20½	45	
	50	18½	18½	18½	19	19½	20	20½	21½	21½	50	
	60	20½	20½	21	21½	22	22	23	24	24	60	
	70	22½	23	23½	23½	24	24½	25	26	26	70	
11-15	16	11	11	11	11	11	12	12½	13	13	16	4-5
	20	11	11	12	12½	13	13½	14	15	15	20	
	25	12½	13	13½	14	14	14½	15½	16½	16½	25	
	30	14	14	14½	15	15½	16	17	18½	18½	30	
	35	15	15	16	16½	17	17½	18½	19½	19½	35	
	40	17	17	17½	18½	18½	19	20	21	21	40	
	45	17½	18½	18½	19	19½	20½	21	22	22	45	
	50	19	19½	20	20½	20½	21	22½	23½	23½	50	
	60	21½	22	22	22½	23½	24	25	26	26	60	
	70	23½	24	24½	25	25½	26	27	28	28	70	
		100	110	130	150	175	200	250	300			

INSPECTION TABLE 56 L-J—(Continued)

Equivalent Wire Load Telephone Wires	L'gth of Pole in Feet	Minimum Ground Line Circumferences in Inches								L'gth of Pole in Feet	Equivalent Wire Load Power Wires
		Length of Span in Feet									
		100	110	130	150	175	200	250	300		
16-20	16	11	11	11	11½	12	12½	13½	14	16	6
	20	12	12	13	13½	14	14	15½	16½	20	
	25	13½	13½	14	14½	15	16	17	18½	25	
	30	14½	14½	15½	16	17	17½	18½	19½	30	
	35	16	16	17	17½	18½	18½	20	20½	35	
	40	17½	17½	18½	19	19½	20½	21½	22½	40	
	45	18½	19	19½	20½	20½	21	22½	23½	45	
	50	20	20½	20½	21	22	22½	23½	25	50	
	60	22½	22½	23	23½	24½	25	26	27½	60	
	70	24½	24½	25½	26	26½	27	28½	29½	70	
21-25	16	11	11	11½	12	13	13½	14	15½	16	7
	20	12½	13	13½	14	14½	15	16½	17½	20	
	25	14	14	14½	15½	16	17	17½	19	25	
	30	15	15½	16½	17	17½	18½	19½	20½	30	
	35	16½	17	17½	18½	19	19½	20½	22	35	
	40	18½	18½	19	20	20½	21	22½	23½	40	
	45	19½	20	20½	21	21½	22½	23½	25	45	
	50	20½	20½	21½	22	23	23½	25	26½	50	
	60	23	23	24	24½	25½	26	27½	29	60	
	70	25	25½	26	27	27½	28½	29½	31	70	
26-30	16	11	11½	12	12½	13½	14	14½	16	16	8-9
	20	13	13½	14	14½	15	16	17	18½	20	
	25	14	14½	15½	16	17	17½	18½	20	25	
	30	16	16½	17	17½	18½	19	20½	21½	30	
	35	17½	17½	18½	19	20	20½	22	23½	35	
	40	19	19½	20	20½	21½	22	23½	25	40	
	45	20	20½	21	22	23	23½	25	26½	45	
	50	21	21½	22½	23	23½	24½	27	27½	50	
	60	23½	24	25	25½	26	27	28½	30	60	
	70	26	26	27	27½	28½	29½	31	32½	70	
		100	110	130	150	175	200	250	300		

INSPECTION TABLE 56 L-J—(Continued)

Equivalent Wire Load Telephone Wires	L'gth of Pole in Feet	Minimum Ground Line Circumferences in Inches								L'gth of Pole in Feet	Equivalent Wire Load Power Wires
		Length of Span in Feet									
		100	110	130	150	175	200	250	300		
31-40	20	14	14	14½	15½	16½	17	18½	19½	20	10-11
	25	15½	16	16½	17½	18½	18½	20	21	25	
	30	17	17½	18½	19	20	20½	22	23½	30	
	35	18½	18½	19½	20½	21	22	23½	25	35	
	40	20	20½	21	22	23	23½	25½	27	40	
	45	21	21½	22½	23½	24	25	27	28	45	
	50	22½	23	23½	24½	25½	26½	28	30	50	
	70	27	27½	28½	29½	30	31	33	35	70	
41-50	20	14	14½	15½	16	17	17½	19	20½	20	12-14
	25	16	16½	17½	18½	19	19½	21	22½	25	
	30	17½	18½	19	20	20½	21½	23	24½	30	
	35	19	19½	20½	21	22½	23½	25	26½	35	
	40	20½	21½	22½	23½	24	25	27	28½	40	
	45	22	23	23½	24½	25½	26½	28	30	45	
	50	23½	23½	25	26½	27	27½	30	31½	50	
	70	28	28½	29½	30½	31½	32½	34½	36½	70	
51-60	25	16½	17	17½	18½	19½	20½	22	23½	25	15-17
	30	18½	19	20	20½	21½	22½	24	26	30	
	35	20	20½	21	22½	23½	24	26	27½	35	
	40	21½	22	23½	24	25½	26½	28	30	40	
	45	23	23½	24½	25½	26½	27½	29½	31½	45	
	50	24	25	26	27	28	29	31	33	50	
	60	26½	27½	28½	29½	30½	31½	33½	36	60	
	70	29	29½	30½	32	33	34	36	38½	70	
		100	110	130	150	175	200	250	300		

INSPECTION TABLE 56 L-J—(Continued)

Equivalent Wire Load Telephone Wires	L'gth of Pole in Feet	Minimum Ground Line Circumferences in Inches								L'gth of Pole in Feet	Equivalent Wire Load Power Wires
		Length of Span in Feet									
		100	110	130	150	175	200	250	300		
61-70	25	17	17½	18½	19	20½	20½	22½	23½	25	18-20
	30	19	19½	20½	21	22½	23½	25	26½	30	
	35	20½	21	22	23	24	25	27	28½	35	
	40	22½	23	24	25	26	27	29	30½	40	
	45	23½	24	25½	26½	27½	28½	30½	32½	45	
	50	25	25½	27	27½	29	30	32½	34	50	
	60	27½	28½	29½	30½	32	33	35	37	60	
	70	30	30½	32	33	34½	35½	37½	39½	70	
71-80	25	17½	17½	18½	19½	20½	21	23	24	25	21-22
	30	19½	20	20½	21½	23	23½	25½	27	30	
	35	21	21½	22½	23½	24½	26	27½	29½	35	
	40	23	23½	24½	25½	27	28	30	31½	40	
	45	24	25	26	27	28½	29½	31½	33	45	
	50	26	26½	27½	28½	30	31	33	35	50	
	60	28½	29½	30	31½	33	34	36½	38	60	
	70	31	31½	33	34	35½	36½	39	41	70	
81-90	25	17½	17½	19	19½	20½	21½	23	24	25	23-25
	30	19½	20½	21	22	23½	24	26	27	30	
	35	21½	22	23½	24	25½	26½	28	30	35	
	40	23½	24	25	26½	27½	28½	30½	32	40	
	45	25	25½	27	27½	29	30	32½	34	45	
	50	26½	27	28	29½	30½	32	34	36½	50	
	60	29½	30	31	32½	33½	35	37	39½	60	
	70	31½	32½	33½	35	36½	37½	40	42½	70	
		100	110	130	150	175	200	250	300		