

STRINGING SAGS

COPPER OR STEEL LINE WIRE

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1. GENERAL

- 1.01 This section contains information regarding the stringing sags of **Copper** or **Steel Line Wire**.
- 1.02 The sag tables contained herein were formerly included in Section G31.116.1, Issue 1.
- 1.03 Detailed information regarding the determination of the storm loading area or average span lengths and the use of the sag tables is contained in Section G31.116.1, Issue 2.
- 1.04 Copper-Steel wire, H wire or E wire placed on the same pole line with copper or steel wire should be sagged in accordance with the sag tables contained in this Practice.

2. INDEX OF SAG TABLES

- 2.01 The following index of sag tables indicates the table to be used for sagging wire in various storm loading areas and for various average span lengths.

Kind of Line Wire	Storm Loading Area	Average Span Length (feet)	Table No.
Copper or Steel Wire	Heavy and Medium	100 — 150	1
		151 — 200	2
		201 — 250	3
Copper-Steel, H or E Wire on the same line with Copper or Steel Wire	Light	100 — 175	4
		176 — 225	5
		226 — 300	6

TABLE 1

SPAN LENGTH (FEET)	TEMPERATURE—DEGREES FAHRENHEIT											
	120	115	110	105	100	95	90	85	80	75	70	65
	SAG (INCHES)											
100	12	11	10½	10	9½	9	8½	8	7½	7	6½	6½
105	13	12	11½	11	10½	10	9½	9	8	7½	7½	7
110	14	13½	12½	12	11½	11	10	9½	9	8½	8	7½
115	15½	14½	14	13	12½	12	11	10½	10	9½	9	8½
120	17	16	15	14	13½	13	12	11½	10½	10	9½	9
125	18½	17	16½	15½	15	14	13	12½	11½	11	10½	10
130	20	18½	18	16½	16	15	14	13½	12½	12	11½	10½
135	21½	20	19	18	17½	16	15½	14½	13½	13	12	11½
140	23	21½	20½	19½	18½	17½	16½	15½	14½	13½	13	12½
145	24½	23	22	21	20	19	18	17	15½	15	14	13½
150	26½	24½	23½	22	21½	20	19	18	17	16	15	14
155	28	26½	25	23½	23	21½	20½	19	18	17	16	15
160	30	28	27	25½	24½	23	22	20½	19	18	17	16
165	32	30	28½	27	26	24½	23	21½	20½	19	18	17
170	34	32	30½	28½	27½	26	24½	23	21½	20½	19½	18½

3. TABLES OF STRINGING SAGS

TABLE 1 (Continued)

SPAN LENGTH (FEET)	TEMPERATURE—DEGREES FAHRENHEIT											
	60	55	50	45	40	35	30	25	20	10	0	-10
	SAG (INCHES)											
100	6	5½	5½	5	5	4½	4	4	4	3½	3½	3
105	6½	6½	6	5½	5½	5	4½	4½	4½	4	4	3½
110	7	7	6½	6	6	5½	5	5	5	4½	4	3½
115	8	7½	7	7	6½	6	5	5	5	4½	4½	4
120	8½	8	7½	7½	7	6½	6	6	5½	5	4½	4½
125	9½	9	8½	8	8	7	6	6	6	5½	5½	4½
130	10	9½	9	8½	8½	7½	7	7	6½	6	5½	5
135	11	10½	10	9½	9	8	7	7	7	6½	6½	5½
140	11½	11	10½	10	9½	8½	8½	8	7½	7	6½	6
145	12½	12	11½	11	10½	9½	8½	8½	8½	7½	7½	6½
150	13½	13	12	11½	11	10	9	9	9	8	7½	7
155	14½	14	13	12½	12	11	10½	10	9½	8½	8	7½
160	15½	14½	14	13	13	11½	11	10½	10	9	8½	8
165	16½	15½	15	14	13½	12	12	11	11	9½	9	8½
170	17½	16½	16	15	14½	13	12½	12	11½	10	9½	9

TABLE 2

SPAN LENGTH (FEET)	TEMPERATURE—DEGREES FAHRENHEIT											
	120	110	100	90	80	70	60	50	40	30	10	-10
	SAG (INCHES)											
135	17½	16½	15	14	13	11½	10½	10	9	8	7	5½
140	19	17½	16	15	14	12½	11½	10½	9½	9	7½	6
145	20½	19	17½	16	15	13½	12½	11½	10½	9½	8	6½
150	22	20½	18½	17	16	14½	13½	12	11	10	8½	7
160	25	23	21	19½	18	16	15	14	12½	11½	9½	8
170	28	26	23½	22	20½	18½	17	15½	14	13	11	9½
180	31½	29	26½	24½	23	20½	19	17½	15½	14½	12	10½
190	35	32½	29½	27	25½	23	21	19½	17	16	13½	11½
200	38½	36	33	30	28½	25½	23½	21½	19	18	15	13
210	42½	39½	36	33½	31	28½	26	24	21½	20	16½	14
220	47	43½	40	36½	34	31	28½	26½	23½	21½	18	15
230	51½	47½	43½	40½	37½	34	31	29	26	24	19½	16½

TABLE 3

SPAN LENGTH (FEET)	TEMPERATURE—DEGREES FAHRENHEIT											
	120	110	100	90	80	70	60	50	40	30	10	-10
	SAG (INCHES)											
180	28½	26½	25	23½	22	21	19	18	16½	15½	13	11½
185	30	28	26½	25	23	22	20	19	17½	16	14	12
190	32	30	28	26½	24½	23	21½	20	18½	17	14½	12½
195	33½	31½	29½	27½	26	24½	22½	21	19½	18	15½	13½
200	35½	33	31	29	27	25½	23½	22	20½	19	16	14
210	39	36½	34	32	30½	28	26	24½	22½	21	18	15½
220	43	40	37½	35	33	31	28½	27	25½	23	20	17
230	46½	43½	41	38½	36	34	31½	29½	27	25	21½	18½
240	51	47½	44½	41½	39	37	34	32	29½	27	23½	20
250	55	51½	48½	45½	42½	40	37	34½	32	29½	25½	22
260	59½	56	52	49	45½	43½	39½	37½	34½	32	27½	23½
270	64½	60	56	53	49	46½	43	40½	37	34	29½	25½

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COPPER OR STEEL LINE WIRE

TABLE 4

SPAN LENGTH (FEET)	TEMPERATURE—DEGREES FAHRENHEIT										
	120	115	110	105	100	95	90	85	80	75	70
	SAG (INCHES)										
100	9	8½	8	7½	7	7	6½	6	6	5½	5
105	10	9½	9	8½	8	7½	7	7	6½	6	6
110	11	10½	9½	9	9	8	8	7½	7	7	6
115	12	11½	10½	10	9½	9	8½	8	8	7½	7
120	13	12½	11½	11	10½	10	9½	9	8½	8	7½
125	14	13½	12½	12	11	10½	10	9½	9	9	8
130	15	14½	13½	13	12	11½	11	10½	10	9½	9
135	16½	15½	14½	14	13	12½	12	11½	10½	10	9½
140	17½	16½	15½	15	14	13½	12½	12	11	11	10
145	19	18	17	16	15	14	13½	13	12½	12	11
150	20	19	18	17	16	15	14½	14	13	12½	11½
155	21½	20½	19	18½	17	16½	15½	15	14	13½	12½
160	23	22	20½	19½	18	17½	16½	16	15	14½	13
165	24½	23	21½	20½	19	18½	17½	17	16	15½	14½
170	26	24½	23	22	20½	19½	18½	18	16½	16	14½
175	27½	26	24½	23½	21½	20½	20	19	18	17	16
180	29	27½	26	24½	23	22	21	20	18½	18	16½
185	31	29	27½	26	24	23	22	21	20	19	18
190	32½	31	29	27½	25½	24½	23	22½	21	20½	18½

TABLE 4 (Continued)

SPAN LENGTH (FEET)	TEMPERATURE—DEGREES FAHRENHEIT										
	65	60	55	50	45	40	35	30	25	20	15
	SAG (INCHES)										
100	5	4½	4½	4	4	4	3½	3½	3½	3½	3
105	5½	5	5	4½	4½	4½	4	4	4	3½	3½
110	6	5½	5½	5	5	4½	4½	4½	4	4	4
115	6½	6½	6	5½	5½	5	5	4½	4½	4½	4
120	7½	7	6½	6	6	5½	5½	5	5	5	4½
125	8	7½	7	6½	6½	6	6	5½	5½	5	5
130	8½	8	7½	7	7	6½	6½	6	6	5½	5½
135	9	8½	8½	8	7½	7	7	6½	6½	6	6
140	10	9	9	8	8	7½	7½	7	6½	6½	6
145	10½	10	9½	9	8½	8	8	7½	7	7	6½
150	11½	10½	10	9½	9	8½	8½	8	7½	7½	7
155	12	11½	11	10½	10	9½	9	8½	8½	8	7½
160	13	12	11½	11	10½	10	9½	9	9	8½	8
165	13½	13	12½	11½	11	10½	10	10	9½	9	8½
170	14½	13½	13	12	12	11	10½	10	10	9½	9
175	15½	14½	14	13	12½	12	11½	11	10½	10	9½
180	16½	15	14½	13½	13	12	12	11½	11	11	10½
185	17½	16½	15½	14½	14	13½	12½	12½	12	11½	11
190	18	17	16½	15	14½	13½	13½	12½	12½	12	11½

TABLE 5

SPAN LENGTH (FEET)	TEMPERATURE—DEGREES FAHRENHEIT											
	120	110	100	90	80	70	60	50	40	30	20	10
	SAG (INCHES)											
150	18½	17	15	13½	13	11½	10½	10	9½	8½	7½	7
155	20	18	16	14½	13½	12½	11½	10½	10	9	8	7½
160	21	19	17	15½	14½	13½	12	11½	10½	9½	8½	8
165	22½	20½	18	16½	15½	14	13	12	11	10	9½	8½
170	24	21½	19½	17½	16½	15	14	13	12	11	10	9
180	26½	24½	22	20	18½	17	15½	14½	13	12	11	10
190	30	27	24	22	20½	19	17	16	15	13½	12½	11½
200	33	30	27	24½	23	21	19	17½	16½	15	13½	12½
210	36½	33	29½	27	25	23	21	19½	18	16½	15	14
220	40	36½	32½	29½	27½	25	23	21½	20	18	16½	15½
230	43½	39½	35½	32½	30	28	25½	23½	22	20	18	17
240	47½	43	38½	35½	32½	30	27½	25½	23½	21½	19½	18½

TABLE 6

SPAN LENGTH (FEET)	TEMPERATURE—DEGREES FAHRENHEIT											
	120	110	100	90	80	70	60	50	40	30	20	10
	SAG (INCHES)											
200	28½	26½	25	23½	22	20½	19	17½	16½	15	14	13
205	29½	27½	26½	24½	23	21½	20	18½	17	16	15	14
210	31	29	27½	25½	24	22½	21	19½	18	16½	15½	14½
215	32½	30½	29	27	25	23½	22	20½	19	17½	16½	15
220	34	32	30	28½	26½	25	23	21½	20	18½	17	16
230	37½	35	33	31	29	27	25	23½	21½	20	18½	17½
240	40½	38	36	33½	31½	29½	27	25½	23½	21½	20½	19
250	44	41	39	36½	34	32	29½	27½	25½	23½	22	20½
260	47½	44½	42	39½	37	34½	32	29½	27½	25½	24	22
270	51½	48	45½	42½	39½	37½	34½	32	30	27½	25½	24
280	55	51½	49	45½	42½	40	37	34½	32	29½	27½	25½
290	59	55	52½	49	46	43	39½	37	34½	32	29½	27½
300	63	59	56	52½	49	46	42½	39½	36½	33½	32	29½
310	67½	63	60	56	52½	49½	45½	42½	39	36	34	31½
320	72	67	64	60	56	52½	49½	45	42	38½	36	33½