TABLE VIII.—STEEL-REINFORCED ALUMINIUM (4 STEEL 3 ALUMINIUM).

Wind, 18 lb. per square foot of diametral plane.

Constants.—Coefficient of thermal expansion = $7{\cdot}74 \times 10^{-6}$ per degree Fahrenheit; modulus of elasticity = $20{\cdot}2 \times 10^{6}$ lb. per square inch.

NOTE.—This table is for use with conductors having a breaking-strength not less than that stated.

7/·0834 in.

Constants.—Area, 0·03824 sq. in.; breaking-strength, 4,180 lb.; diameter, 0·250 sq. in.; loading factor, 4·134; maximum tension in conductor, 1,672 lb.; weight, 0·0936 lb. per foot.

Span.	Datum.		Degrees Fahrenheit above Datum.									
	0.		20.		40.		60.		80.		100.	
	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.
Ft.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.
180 ..	1619	0 5½	1500	0 6	1381	0 6½	1263	0 7¼	1144	0 8	1026	0 8¾
220 ..	1594	0 8½	1474	0 9¼	1355	0 10	1238	0 11	1120	1 0	1003	1 1½
260 ..	1562	1 0¼	1443	1 1¼	1325	1 2¼	1208	1 3¾	1090	1 5½	974	1 7½
300 ..	1528	1 4½	1410	1 6	1292	1 7½	1176	1 9½	1061	2 0	946	2 3
340 ..	1487	1 10	1369	2 0	1253	2 2	1138	2 4½	1024	2 7½	912	2 11½
380 ..	1443	2 4	1326	2 6½	1211	2 9½	1098	3 1	986	3 5	877	3 10

TABLE IX.—BARE COPPER-COVERED STEEL.

Wind, 18 lb. per square foot of diametral plane.

Constants.—Coefficient of thermal expansion = $7{\cdot}2 \times 10^{-6}$ per degree Fahrenheit; modulus of elasticity = 20×10^{6} lb. per square inch.

NOTE.—This table is for use with conductors having a breaking-strength not less than that stated for each size of conductor.

(A.) 1/·162 in.

Constants.—Area, 0·02062 sq. in.; breaking-strength, 1,800 lb.; diameter, 0·162 in.; loading factor, 3·475; maximum tension in conductor, 720 lb.; weight, 0·073 lb. per foot.

Span.	Datum.		Degrees Fahrenheit above Datum.									
	0.		20.		40.		60.		80.		100.	
	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.
Ft.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.
180 ..	658	0 5½	600	0 6	543	0 6½	485	0 7½	430	0 8½	376	0 9½
220 ..	629	0 8½	572	0 9½	516	0 10½	460	0 11½	406	1 1	355	1 3
260 ..	594	1 0	538	1 2	484	1 3	432	1 5	381	1 7	334	1 10
300 ..	556	1 6	502	1 8	450	1 10	402	2 1	356	2 4	315	2 7
340 ..	514	2 1	464	2 3	417	2 6	373	2 10	332	3 2	297	3 7
380 ..	472	2 9	426	3 1	384	3 5	344	3 10	312	4 3	282	4 8

(B.) 1/·204 in.

Constants.—Area, 0·03278 sq. in.; breaking-strength, 2,650 lb.; diameter, 0·204 in.; loading factor, 2·821; maximum tension in conductor, 1,060 lb.; weight, 0·116 lb. per foot.

Span.	Datum.		Degrees Fahrenheit above Datum.									
	0.		20.		40.		60.		80.		100.	
	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.	Ten.	Sag.
Ft.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.	lb.	Ft. in.
180 ..	987	0 5¾	896	0 6¼	806	0 7	715	0 8	629	0 9	544	0 10½
220 ..	953	0 9	863	0 10	776	0 11	689	1 0	605	1 2	526	1 4
260 ..	914	1 1	827	1 2	740	1 4	657	1 6	580	1 8	509	1 11
300 ..	869	1 6	785	1 8	704	1 10	627	2 1	556	2 4	492	2 8
340 ..	823	2 0	744	2 3	668	2 6	596	2 10	532	3 2	476	3 6
380 ..	773	2 9	698	3 0	630	3 4	566	3 8	510	4 1	461	4 6