

**V.I.R. COPPER—continued.**

(C.) 7/064 in. (7/16 S.W.G.).

Constants.—Area (copper), 0.0225 sq. in.; diameter (covered), 0.359 in.; loading factor, 4.18; maximum tension in conductor, 562 lb.; weight of covered conductor, 0.1328 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 ..	224	2 5	199	2 8	179	3 0	163	3 4	151	3 7	140	3 10
220 ..	186	4 4	173	4 8	162	5 0	153	5 3	145	5 6	138	5 10
260 ..	168	6 8	160	7 0	153	7 4	148	7 7	142	7 11	137	8 2
300 ..	158	9 5	153	9 9	148	10 0	144	10 4	140	10 8	137	10 11
340 ..	152	12 7	148	12 11	145	13 3	142	13 6	139	13 9	136	14 1
380 ..	148	16 1	145	16 5	143	16 9	140	17 0	138	17 4	136	17 7

(D.) 19/052 in.

Constants.—Area (copper), 0.0403 sq. in.; diameter (covered), 0.441 in.; loading factor, 3.07; maximum tension in conductor, 1,008 lb.; weight of covered conductor, 0.2278 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 ..	653	1 5	552	1 8	482	1 11	416	2 3	365	2 7	327	2 10
220 ..	552	2 6	487	2 10	434	3 2	391	3 6	356	3 10	327	4 3
260 ..	482	4 0	438	4 5	403	4 9	374	5 2	349	5 6	327	5 11
300 ..	437	5 10	409	6 3	384	6 8	362	7 1	344	7 5	327	7 10
340 ..	410	8 0	390	8 5	372	8 10	355	9 3	341	9 8	327	10 1
380 ..	391	10 6	376	10 11	362	11 4	350	11 9	338	12 1	328	12 6

(E.) 19/064 in. (19/16 S.W.G.).

Constants.—Area (copper), 0.0611 sq. in.; diameter (covered), 0.513 in.; loading factor, 2.55; maximum tension in conductor, 1,525 lb.; weight of covered conductor, 0.3285 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 ..	1191	1 0	1026	1 3	875	1 6	746	1 9	641	2 1	555	2 5
220 ..	1069	1 10	928	2 2	818	2 5	710	2 10	631	3 2	566	3 6
260 ..	962	2 11	850	3 3	759	3 8	686	4 0	625	4 5	575	4 10
300 ..	872	4 3	791	4 8	724	5 1	666	5 6	618	6 0	578	6 5
340 ..	809	5 10	748	6 4	696	6 10	653	7 3	614	7 9	581	8 2
380 ..	764	7 9	717	8 3	677	8 9	642	9 3	611	9 9	584	10 2

**TABLE VII.—BARE STEEL-CORED ALUMINIUM (1 STEEL 6 ALUMINIUM).**

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

Constants.—Coefficient of thermal expansion =  $10.55 \times 10^{-6}$  per degree Fahrenheit; modulus of elasticity =  $12.5 \times 10^6$  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.) 7/0586 in.

Constants.—Area, 0.01888 sq. in.; breaking-strength, 820 lb.; diameter, 0.176 in.; loading factor, 9.317; maximum tension in conductor, 328 lb.; weight, 0.0285 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 ..	140	0 10	104	1 1	76	1 6	59	2 0	48	2 5	41	2 10
220 ..	83	2 1	66	2 8	55	3 2	48	3 7	43	4 0	39	4 5
260 ..	59	4 1	52	4 8	47	5 2	44	5 7	40	6 0	38	6 4
300 ..	50	6 5	46	6 11	43	7 5	41	7 10	39	8 3	37	8 8
340 ..	45	9 1	43	9 7	41	10 0	40	10 5	38	10 10	37	11 3
380 ..	43	12 0	41	12 5	40	12 11	39	13 4	37	13 10	36	14 3