

Ampacities of Insulated Conductors From NEC Table 310.16 (2020 edition)

Not More than Three Conductors in Raceway, Cable or Earth (Directly Buried)

(Based on Ambient Temperature of 30° C, 86° F)

The previous table version can be seen here, but should not be used.

Size AWG Kcmil	Copper Conductors			Aluminum Conductors Copper-Clad Conductors		
	60° C (140° F)	75° C (167° F)	90° C (194° F)	60° C (140° F)	75° C (167° F)	90° C (194° F)
	Types	Types	Types	Types	Types	Types
	TW UF	RHW THHW THW THWN XHHW XHWN USE ZW	TBS, SA, SIS, FEP, FEPB, MI, PFA, RHH, RHW-2, THHN, THHW, THW-2, THWN-2, USE-2, XHH, XHHW, XHHW-2, XHWN, XHWN-2, XHHN, Z, ZW-2	TW UF	RHW THHW THW THWN XHHW XHWN USE	TBS SA, SIS THHN, THHW THW-2 THHW-2, RHH, RHW-2, USE-2, XHH, XHHW, XHHW-2, XHWN XHH, XHHW XHWN-2, XHHN
18 *	-	-	14	-	-	-
16 *	-	-	18	-	-	-
14 *	15	20	25	-	-	-
12 *	20	25	30	15	20	25
10 *	30	35	40	25	30	35
8	40	50	55	35	40	45
6	55	65	75	40	50	55
4	70	85	95	55	65	75
3	85	100	115	65	75	85
2	95	115	130	75	90	100
1	110	130	145	85	100	115
1/0	125	150	170	100	120	135
2/0	145	175	195	115	135	150
3/0	165	200	225	130	155	175
4/0	195	230	260	150	180	205
250	215	255	290	170	205	230
300	240	285	320	195	230	260
350	260	310	350	210	250	280
400	280	335	380	225	270	305
500	320	380	430	260	310	350
600	350	420	475	285	340	385
700	385	460	520	315	375	425
750	400	475	535	320	385	435
800	410	490	555	330	395	445
900	435	520	585	355	425	480
1000	455	545	615	375	445	500
1250	495	590	665	405	485	545
1500	525	625	705	435	520	585
1750	545	650	735	455	545	615
2000	555	665	750	470	560	630

Notes:

1. Section 310.15(B) shall be referenced for ampacity correction factors where the ambient temperature is other than 30 C (86 F).
2. Section 310.15(C)(1) shall be referenced for more than three current-carrying conductors.
3. Section 310.16 shall be referenced for conditions of use.

*Section 240.4(D) shall be referenced for conductor overcurrent protection limitations, except as modified elsewhere in the Code.

Correction Factors for Ambient Temperature From NEC Table 310.15(B)(1) Over 30° C, 86° F

For Ambient Temperatures Over 30° C, 86° F, multiply the ampacities shown above by the appropriate factor shown below:

Ambient Temperature	Copper Conductors			Aluminum Conductors Copper-Clad Conductors		
21-25 C, 79-77 F	1.08	1.05	1.04	1.08	1.05	1.04
26-30 C, 78-86 F	1	1	1	1	1	1
31-35 C, 87-95 F	0.91	0.94	0.96	0.91	0.94	0.96
36-40 C, 96-104 F	0.82	0.88	0.91	0.82	0.88	0.91
41-45 C, 105-113 F	0.71	0.82	0.87	0.71	0.82	0.87
46-50 C, 114-122 F	0.58	0.75	0.82	0.58	0.75	0.82
51-55 C, 123-131 F	0.41	0.67	0.76	0.41	0.67	0.76
56-60 C, 132-140 F	-	0.58	0.71	-	0.58	0.71
61-65 C, 141-149 F	-	0.47	0.65	-	0.47	0.65
66-70 C, 150-158 F	-	0.33	0.58	-	0.33	0.58
71-75 C, 159-167 F	-	-	0.50	-	-	0.50
76-80 C, 168- 176 F	-	-	0.41	-	-	0.41
81-85 C, 177-185 F	-	-	0.29	-	-	0.29