

Electrical Cheat Sheet

COPPER WIRE AMPACITY (NEC 310.16)

AWG	60C	75C
14	15	20
12	20	25
10	30	35
8	40	50
6	55	65
4	70	85
2	95	115

BREAKER TO COPPER WIRE

Breaker	Min Cu wire
15 A	14 AWG
20 A	12 AWG
30 A	10 AWG
40 A	8 AWG
50 A	6 AWG
60 A	4 AWG

BOX FILL: VOL PER CONDUCTOR (314.16)

AWG	cu in
14	2.00
12	2.25
10	2.50
8	3.00
6	5.00

Device yoke = 2x largest conductor. All grounds count as one (largest).
Each internal clamp = one (largest).

VOLTAGE DROP: MAX RUN (3%)

AWG	120V ft	240V ft
14	38	76
12	46	91
10	48	97
8	58	115
6	67	133

One-way feet, copper at the circuit's rated amps. Beyond this, size up a gauge. Follow current NEC and a licensed electrician.