

WIRE SIZE AMP CHART

AMPERAGE RATINGS*														
WIRE SIZE (AWG OR Kcmil)		14	12	10	8	6	4	3	2	1	1/0	2/0	3/0	4/0
C O P P E R	INDOOR & OUTDOOR WIRE	15	20	30	40	55	70	85	95					
	RHW, THHN, XHHW, SE, USE	15	20	30	50	65	85	100	115	130	150	175	200	230
	RHW, THHN, XHHW & SE IN (DRY LOCATIONS ONLY)	15	20	30	55	75	95	110	130	150	170	195	225	260
A L U	RHW, THHN, XHHW & SE IN (DRY LOCATIONS ONLY)		15	25	45	60	75	85	100	115	135	150	175	205

*Average ratings for insulated wire & cable rated 0-2000 volts, based on table 310-16 of the 2005 NEC for not more than 3 conductors in raceway or cable or earth (directly buried) & an ambient temperature of 30°C/86°F. Branch circuits only. Not Service Entrance.

RECOMMENDED CIRCUIT LENGTHS FOR VOLTAGE DROP*											
WIRE SIZE (AWG)		15	20	30	40	50	60	70	80	90	100
C O P P E R	14	50									
	12	65	50								
	10	105	80	55							
	8	160	120	80	60						
	6	260	195	130	100	80					
	4	410	305	205	155	120	100	85			
	2	665	500	330	250	200	165	140	125	110	100
A L U	6	155	115	80	60	50					
	4	245	185	125	95	75	60	55			
	2	295	295	200	150	120	100	85	75	65	60

*Recommended maximum circuit lengths in test for voltage systems of 120 volts. For 240-volt systems, circuit lengths may be doubled. Note: Extremely long circuits can produce voltage losses whereby some electrical equipment may not operate properly. Following these recommended values should provide reasonable efficiency of operation.

Charts provided by Coleman Cable, LLC.

Definition of Amperage:

Amperage is a measure of the electrical current flowing through a circuit. Current is measured in amperes or "amps". You must use the correct size wire for the amperage requirement of the circuit to prevent the wire from over heating.

Determining Amperage Requirement of a Circuit

The number and type of electrical devices connected to a circuit determine the amperage requirement of the circuit. Usually, a general-purpose house circuit is designed for 20 amps. Lighting circuits may be designed for only 15 amps.

Calculating Amperage for a Circuit

First add up the wattage of all the electrical devices that will be on the circuit. Then, divide the total wattage by the voltage of the system, 110 or 220, and that will give you the expected current or amps.

Source

"Ampacity Charts." Ampacity Charts. Web. 02 July 2014. <http://www.cerrowire.com/ampacity-charts>.