



CITY ELECTRIC SUPPLY

AMPACITY CHARTS

- 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.
- 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.
- To calculate the 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.

Wire Size and Amp Ratings

Wire Gauge Size	Copper			Aluminum	
	60°C (140°F)	75°C (167°F)	90°C (194°F)	75°C (167°F)	90°C (194°F)
	NM-B	THW	THWN-2	THW	XHHW-2
	UF-B	THWN	THHN	THWN	THHN
	---	SE	XHHW-2	SE	TWHN-2
	---	USE	---	USE	---
	---	XHHW	---	XHHW	---
14	15	15	15	---	---
12	20	20	20	15	15
10	30	30	30	25	25
8	40	50	55	40	45
6	55	65	75	50	60
4	70	85	95	65	75
3	85	100	110	75	85
2	95	115	130	90	100
1	---	130	150	100	115
1/0	---	150	170	120	135
2/0	---	175	195	135	150
3/0	---	200	225	155	175
4/0	---	230	260	180	205
250	---	255	290	205	230
300	---	285	320	230	255
350	---	310	350	250	280
500	---	380	430	310	350
600	---	420	475	340	385
750	---	475	535	385	435
1000	---	545	615	445	500

WARNING! Installation of electrical wire can be hazardous, if done improperly, can result in personal injury or property damage. For safe wiring practices, consult the National Electrical Code® and your local building inspector.