

# Around the House

From Our Greenwave Electric  
Family to Yours

## greenWaveelectric

### What Greenwave Does:

- Aluminum Wiring Replacement.
- Electrical Safety Inspections.
- Home Generators.
- Home Re-Wiring.
- Electrical Repairs.
- Data Cable Wiring Phone TV Satellite.
- Lighting.
- Residential Pools.
- Panel Upgrades.
- Service Upgrades.
- Surge Protection.

### Benefits of Using Greenwave:

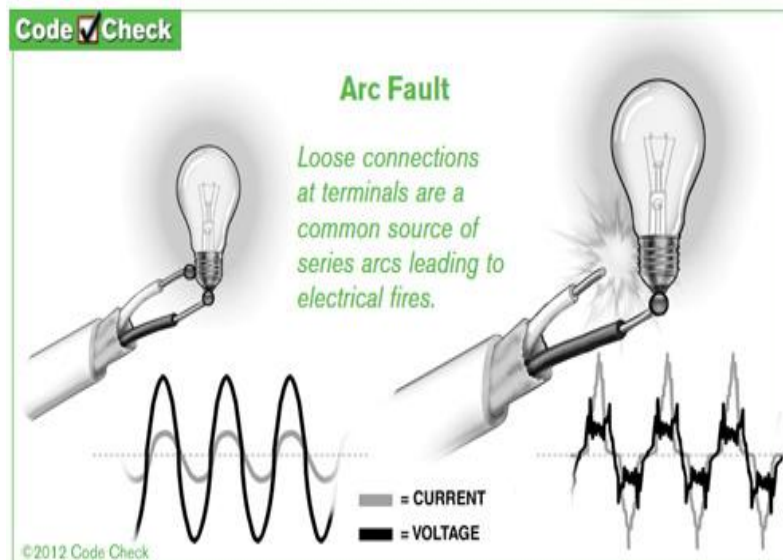
- On Time Every Time, or We Buy You Dinner!
- Professional Technicians.
- Up-Front Proposals.
- Shoe Covers for Floor Protection.
- Detailed Clean-up When We're Finished.

### May is National Electrical Safety Month

Every year in May, National Electrical Safety Month is observed. It is crucial for us at Greenwave Electric to stay up to date with potential safety electrical advancements and changes made to the National Electric Code (NEC) that effect electrical requirements in residences.

One of the more notable changes soon to be adopted in Topeka with the 2014 NEC, deals with the ever-advancing technology of the Arc Fault Circuit Interrupters (AFCI'S), and the new (required by code) placement of them in houses.

AFCI's were developed to detect and interrupt a current of electricity where a dangerous arc fault is detected. An arc fault is a high power discharge of electricity between two or more conductors. These arcs can produce temperatures of several thousand degrees, but at the same time, draw less current than is necessary to trip a conventional breaker, and are the origins of many house fires.



## Causes of Arc Faults

Any type of wire degradation can cause an arc fault to occur, such as:

Age of wiring

Humidity or heat

Extended voltage stress

Physical damage to wiring can also cause an arc fault to occur, a few examples are:



Nails carelessly driven into walls can break wire insulation and cause arcing.



Cables that are improperly nailed or stapled too tightly against a wall stud can sever insulation and cause arcing.



Furniture pushed against or resting on electrical cords can damage the wire insulation. Damaged cords can become a potential condition for arcing.



Extension or appliance cords that are damaged or have worn or cracked insulation can contribute to electrical arcing.